Lessons from CP in Passamaquoddy and beyond

by

Peter Nicholas Grishin

B.A., University of Cambridge, Queens' College (2018)

Submitted to the Department of Linguistics and Philosophy
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Linguistics

at the

MASSACHUSETTS INSTITUTE OF TECHNOLOGY

September 2023

Author . . . .

Department of Linguistics and Philosophy
September 6, 2023

Certified by . . . .

David M. Pesetsky
Ferrari P. Ward Professor of Modern Languages and Linguistics
Thesis Supervisor

Accepted by . . . .

Danny Fox
Anshen-Chomsky Professor of Language & Thought
Department Head

Lessons from CP in Passamaquoddy and beyond
by
Peter Nicholas Grishin

Submitted to the Department of Linguistics and Philosophy
on September 6, 2023, in partial fulfillment of the
requirements for the degree of
Doctor of Philosophy in Linguistics

Abstract

This thesis explores various aspects of CP morphosyntax in Passamaquoddy-Wolastoqey and other Algonquian languages and their consequences for broader generative syntactic theory. It consists of two parts: one investigates clause typing and clause size in Passamaquoddy, and the other investigates the properties of a CP-layer agreement marker, the peripheral suffix, across Algonquian. In addition, a lengthy background chapter offers new data and insight on the correct analysis of the inverse and obviation in Passamaquoddy and across Algonquian.

Part I studies the distribution of the three morphologically-distinguished non-imperative clause types in Passamaquoddy: the independent, the conjunct, and the subordinative. I argue that their distribution in complementation and coordination structures falls out naturally from their structural size, following the work of Wurmbrand and Lohninger (2023) and Bjorkman (2012, 2013). I support this conclusion by carefully investigating how each clause type interacts with Ā phenomena like *wh* movement and long distance agreement, showing that various complex interactions between these syntactic processes are derivative of clause size: independent clauses and conjunct clauses under epistemic attitudes are large, phasal CPs, conjunct clauses under direct perception predicates are smaller, non-phasal CPs, and subordinative clauses are bare TPs.

Part II studies two unexpected properties of peripheral agreement across Algonquian: *(i)* its preference for agreeing with third persons, no matter their syntactic role (found in all Algonquian languages); and *(ii)* its preference for agreeing with the least local goal (found in languages like Passamaquoddy, Ojibwe, and Wampanoag). I explore the consequences of these typologically unusual properties for the theory of φ agreement and provide an analysis of the cross-Algonquian variation we find in peripheral agreement (building on Xu 2021, 2022). I argue that Algonquian third person preference forces us to accept Nevins (2007) and Trommer's (2008) conclusion that third person cannot be underspecified relative to first and second person, even in the syntax (contra Preminger 2019a and van Alem 2023). Additionally, I show that Algonquian lowest preference doesn't force us to give up on standard locality properties of Agree, and argue for an analysis under which C agrees with *all* matching accessible goals, but only spells out the *last* Agree relation—Expone Outermost—building a parallel with similar ideas in the domain of multiple case assignment. Finally, I capture cross-Algonquian variation in peripheral agreement by varying the specification of the peripheral agreement probe and varying which arguments are able to shift out of the VP phase.

Thesis Supervisor: David M. Pesetsky
Title: Ferrari P. Ward Professor of Modern Languages and Linguistics

Keti-wolasuweltomuwuk *Acknowledgements*

There are many people who have helped bring this dissertation into existence, who have helped shape me as a linguist and a person, and who have made the past few years here much more enjoyable. I would like to thank these people—I hope I don't leave anyone out.

Pol nkoti-wolasuweltomuwa psi-te wen kisokehkimit 'tolatuwewakon. 'Koti-wolasuweltomulpa ewehki skicinuwatuwewakon—nopal skat 'sami-wapolessiwan, naka nopal kisi-nostakiyan. Ma-tehp yut nkisi-olluhkehqopon skat-op kisi-wicuhkemiyeqsopon. Elinaqsihtit pomawsuwinuwok kisi-wicuhkemihtit naka ehcuwi-wolasuweltomuwuk. Newwok-olu keti-kinuwi-wolasuweltomuwuk 'sami pihce nkisi-witoluhkamkunen: Roger Paul, Grace Paul, Margaret Apt, naka Edwina Mitchell. Kci-woliwon Roger eli messunomuwinomok ktolatuwewakon, kpomawsuwinumok, naka eli-skicinuwihtasik. Elinaqsihtit pomawsuwinuwok wicuhkemot: qin-ote kil nutokehkikemit naka kci-"skeej". Kci-woliwon-ona Gracie eli mecimi-te sikte-wolitahasiyin elewestuwamiyek, naka 'ciw psi-te keq kisokehkimiyek. Mecimi-te kwihqatewestuwamol—'koselomol. Kci-woliwon-ona Dolly eli mecimi-te luhkatomon latuwewakon naka kolusuwakonol, naka eli 'tawi-woli-'sotaqsiyin qenokehkimiyek eli wen skicinuwatuwet. Kci-woliwon-ona Edwina; eci-wihqaceyik witoluhkamol. Tan ci nisewestiyiq, mecimi-te elinaqahk kisokehkimsi. Nopal kisi-wici-liyayiq Neqotkuk. Psi-te kiluwaw elinaqahk kisokehkimiyeq, eli-skicinuwatuwi naka eli-pomawsi. Mam-ote nkoti-wolasuweltomuwak Opolahsomuwehs, David Perley, Dwayne Tomah, Cyril Francis, naka psi-te kotokik kisi-wicuhkemihtit elomikotok. Kci-woliwon eli matonahkatomeq skicinuwatuwewakon.

I would also like to thank the members of the MIT Passamaquoddy Workshop, both current and former: Roger Paul, Tanya Bondarenko, Norvin Richards, Colin Davis, Yadav Gowda, Anton Kukhto, Cora Lesure, Elise Newman, Mitya Privoznov, Giovanni Roversi, and Faith Baca (I hope I'm not missing anyone!). I would especially like to thank Roger Paul and Tanya Bondarenko for all their work in starting this group up in Fall 2019—before then, I had absolutely zero experience in fieldwork or in Algonquian linguistics. I owe so much to the opportunities y'all have given me and everything that I've been able to learn from this group and the wonderful speakers we've worked with. I have so many fond memories from fieldwork trips: from the accommodationally ill-fated first exploratory field trip that has produced so many a naturalistic context for elicitation (how else would it be possible to elicit sentences like *npawatomuwan Norvin mattoktehmuwanehpon ihtoloqsultimok macahawolotiyek* 'I want Norvin to have called the hotel when we leave'?), to weathering winter storms in the Cobscook, to late-night Wordle in languages we barely know, in addition (of course) to being able to talk to and learn so much from so many wonderful, kind, and generous people.

Now, my committee, in alphabetical order: Sabine Iatridou, Will Oxford, David Pesetsky, and Norvin Richards. Thank you all for your help and advice while I was writing this thesis, as well as for many other things. I first met Norvin and David at the 2017 LSA Summer Institute at the University of Kentucky, where they showed me incredible kindness and generosity when I was just a lowly undergraduate. I have changed a lot since then, but their kindness and generosity have stayed the same. Norvin's ever-cheery disposition and reassuring nodding combined with our similar interests and linguistic sensibilities have made meetings with him a joy. I hope we can continue to nerd out together in the future about Passamaquoddy, Wampanoag, fieldwork, exciting crosslinguistic connections, or really anything else. In David I couldn't have asked for a more generous or supportive advisor, even though I may not have been the best advisee (my scrapping paper is still languishing despite David's best efforts to get me to bring it out into the world—maybe one day...). David always believed in what I was doing even when I didn't quite believe in it myself, and his ability to seemingly endlessly come up with counterproposals and alternative analyses has strengthened my argumentation and helped me get to the core of what exactly I want to say—not to mention his invaluable advice in all other aspects of academic life. Will Oxford's visit in 2022-2023 couldn't have come at a better time, overlapping exactly with my final year. So many of the ideas in this thesis build on his work, and the opportunity to have regular meetings with someone with his level of knowledge of both Algonquian as well as theoretical morphosyntax proved truly invaluable. Last but not least, I have to thank Sabine. Though health issues have unfortunately precluded us from meeting regularly this past year, your influence on the way I think about syntax and syntactic argumentation can't be overstated. The syntax class you taught in the first semester of my first year was one of the best and most influential syntax classes I've ever taken: from it I've gained a better appreciation and understanding of how syntactic theory develops (and should develop) over time, and I learned about skepticism and not overvaluing the aesthetics of an analysis.

While not an official committee member, Amy Rose Deal might as well have been: much of the material in Part II of this thesis is directly inspired by conversations with her as well as from the agreement seminar she taught during her visit at MIT in Spring 2022. I thank her for her insightful comments and ideas, as well as for her advice on how to present and frame fieldwork and typological data for theoretical audiences. Conversations with a number of other people have also contributed to various parts of this thesis in various ways—thank you all: Tanya Bondarenko, Phil Branigan, Emily Clem, Chris Hammerly, Elise Newman, Mitya Privoznov, Giovanni Roversi, and anonymous reviewers for Glossa and NLLT.

Stepping back from the dissertation, I've had a very fortunate 5 years here in this department. I firmly believe that our admin office is the best admin office in the world: thank you Aggie Fernandes, Valentina Gaviria Chrissy Graham, Mary Grenham, Chris Naylor, Jen Purdy, and Matt Sikorski for y'all's truly incredible competence and skill in keeping the department running smoothly. I have also benefited from the advice and guidance of a number of other professors during my brief stint moonlighting as a semanticist: thank you Kai von Fintel, Sabine Iatridou, Justin Khoo, and Roger Schwarzschild for taking what I was saying seriously even when I was floundering with the technical details, and helping to bring out the insights and broader theoretical consequences lurking within my not-yet-fully-formed ideas. Roger Schwarzschild in particular has a magical way of somehow understanding what you want to say better than you do, presenting it back to you clearer than you did, and identifying the predictions you make (both good and bad) that you hadn't even crossed your mind. I hope you're enjoying your well-deserved retirement. I also want to thank Danny Fox, who co-advised my first year independent study on ellipsis with David—I truly learned so much from that experience, about how to critically read and evaluate proposals in the literature, how to think about and evaluate predictions of different theories, and more generally just how to do good linguistic research.

Outside of the academic sphere, it's really the friends and community in this department that make it such a welcoming place to be a part of. My cohort (Agnes Bi, Enrico Flor, Tracy Kelley, Anton Kukhto, Katie Van Luven, Patrick Niedzielski, Roger Paul, and Hyun Ji Yoo) and various officemates over the years (Agnes Bi, Sherry Chen, Yadav Gowda, Eunsun Jou, Anton Kukhto, Cora Lesure, Patrick Niedzielski, Giovanni Roversi, Anastasia Tsilia, and Danfeng Wu) have consistently brightened my day, provided numerous (very important and well-deserved) hours of procrastination, and been crucial sources of gossip, commiseration, and general shenanigans. 24.888 has without a doubt been my favorite seminar at MIT: thank you Agnes Bi, Sherry Chen, Filipe Hisao Kobayashi, Keely New, Danfeng Wu, and our cross-registered participants from Harvard Tamisha Tan and Yvette Wu for the opportunity to order so much food at so many different restaurants. I hope we can keep it going this year. Speaking of food, I also want to thank my (French) mentor Keny Chatain and my (French) mentee Adèle Mortier for the invaluable opportunities to have the department pay for our food. I have also really enjoyed playing board games over the years with Neil Banerjee, Agnes Bi, Keny Chatain, Anton Kukhto, Christopher Legerme, Mitya Privoznov, Leo Rosenstein, and Hyun Ji Yoo. Chris(topher) Baron, Tanya Bondarenko, Justin Colley, Colin Davis, Yadav Gowda, and Mitya Privoznov could always be trusted to bring a good time to colloquium parties—oh how things have fallen since y'all left.

Outside of the department, (semi-)regular D&D sessions with Shannon Bryant, Gunnar Lund, Josh Martin, Tamisha Tan, Ian Kirby, Niels Torben Kühlert, Carrie Spadine, and Julia Sturm were invaluable in keeping me sane, and provided me with an excellent source of (semi-)non-linguistic conversation and companionship as well as an excellent source of gossip from down the road at Harvard. I also want to thank my roommates over the years for being sane (never a guarantee!) and allowing my home life to be calm and relaxing and a welcome break from work: Sean Cornelius, Eileen Hopkins, Qianyi Huang, Lucy Jakub, Alby Musaelian, Zhouyi Sun, David Verbart (and Michelle Wang), and Stan Zompì (for that one summer).

My journey to Cambridge MA began in Cambridge UK. My interest in syntax was piqued and developed by the expert teaching and advising of Víctor Acedo-Matellán, Craig Sailor, and Ioanna Sitaridou, and the friendship and conversation (linguistic and non-linguistic) I've had with Sammy Andersson, Malcolm Kennedy, Lis Kerr, Tom Meadows, Lefteris Paparounas, Ollie Sayeed, Wyn Shaw, and Tamisha Tan are some of the fondest memories I have of that time. I also want to thank the "P-squad"—Liam Delaunay, Helen Gildersleeves, Liam Ives, Basil Mustafa, Justin Ng, Fran Penrose, James Prideaux-Ghee, Chloe Shang, and Lily Stancliffe—for being so welcoming to a silly American and being such good steadfast friends during my time at Queens'. I miss y'all—I hope I can come visit soon.

I can't overstate how grateful I am for my friendship with Tamisha Tan in particular. We first met on the Cambridge freshers pages on Facebook, and little did I know then how much you would be a part of my life for the past 8 years. We've studied together, ate together (especially vegetables!), gossiped together, played D&D together, organized ULAB together, went to the LSA summer institute together, went through the PhD applications process together, moved to Cambridge MA together, worked and discussed linguistics together, and so much more. Now we're both done with our PhDs and live in different continents—I hope I can make my way over to Singapore soon to visit, and that you can make your way over here.

Finally, I would like to thank my family: especially my mother, my father, моя бабушка и мой дедушка. Y'all have constantly supported me over the years in so many things. And lastly, Călin, te iubesc; gracias por todo y por todo que viene.

Contents

List of Figures

List of Tables

Abbreviations

1SG:3	1SG acting on 3, etc.
1	first person
2	second person
3	third person
21	first person inclusive (2+1)
ABS	absolutive
ABSN	absentative
ACC	accusative
ADD	additive
ADDR	addressee
ADJZ	adjectivalizer
AI	animate intransitive
AI+O	animate intransitive + secondary object
AN	animate
ANTIP	antipassive
AOR	aorist
APPL	applicative
ASP	aspect
AUTH	author
AV	actor voice
C	complementizer
CAUS	causative
CF	counterfactual
CFOC	contrative focus
CIS	cislocative
CJ	conjunct
CONJ	conjunctive
CTOP	contrastive topic
DAT	dative
DECL	declarative
DEF	definite
DEM	demonstrative
DIM	diminutive
DIR	direct
DOM	differential object marker
DU	dual
DUB	dubitative
E	E preverb
EMPH	emphatic
ENDO	endophoric
ERG	ergative
EXC	exclusive
EXPL	expletive
F	feminine
F	feminine
FOC	focus
FUT	future
FV	final vowel
GEN	genitive
HAB	habitual
HES	hesitation
IC	initial change
II	inanimate intransitive
IMP	imperative
IN	inanimate
INC	inclusive
INCL	inclusive
IND	indicative
INST	instrumental
INT	interrogative
INV	inverse
IPFV	imperfective
KA	KA preverb
LOC	locative
M	M formative
M	masculine
MOD	modal
N	N formative
NDEF	indefinite
NDIR	indirect

NEG	negative
NMLZ	nominalizer
NOM	nominative
NVIS	invisible
OBJ	object
OBV	obviative
OM	object marker
P	P formative
PART	participant
PASS	passive
PAT	patient
PFV	perfective
PL	plural
POLQ	polar question
POSS	possessive
PRET	preterit
PRN	pronoun
PROG	progressive
PROX	proximal
PROX	proximate
PRS	present
PST	past
Q	question particle
REC	recent
RECIP	reciprocal
REFL	reflexive
REM	remote
REP	reportative
SBJ	subject
SBJV	subjunctive
SE	Romance *se*
SG	singular
SM	subject marker
STV	stative
SUB	subordinative
TA	transitive animate
TA+O	transitive animate + secondary object
TI	transtitive inanimate
TOP	topic
TR	transitive
W	W formative
WH	*wh*
X	unspecified subject
Ẅ	umlauting W formative

Chapter 1

Introduction

1.1 Broad overview

This dissertation explores aspects of CP syntax in Passamaquoddy, an Eastern Algonquian language spoken in eastern Maine and New Brunswick, as well as in the Algonquian family as a whole. The investigation is split into two largely independent parts:

- In Part I, "CP and clause size", I closely examine issues of clause type and clause size in Passamaquoddy, where are I argue that the different Algonquian verbal inflectional paradigms/ clause types—INDEPENDENT, CONJUNCT, and SUBORDINATIVE—correspond to different sizes of clauses, and that this allows us to understand their syntactic distribution and semantic properties.
- In Part II, "C and agreement", I survey the variation found across Algonquian in the behavior of a CP-domain φ agreement suffix—the PERIPHERAL SUFFIX—and investigate its consequences for the theory of φ agreement, as well as provide a formal analysis of the variation we find throughout the family.

Additionally, in Chapter 2, I briefly describe some aspects of Passamaquoddy grammar, with a particular focus on the morphosyntax of the inverse (Section 2.4) and obviation (Section 2.5).

The background chapter can be read independently of the rest of the thesis, and should be useful in and of itself for those readers interested in the morphosyntax of the inverse and obviation. The background chapter should also be useful for those readers who are not already familiar with Passamaquoddy or Algonquian in general, as it outlines certain basic grammatical properties of Passamquoddy as well as Algonquianist terms and concepts that are taken for granted in the rest of the thesis. Parts I and II can be read independently of each other, though at a few points in Part II the conclusions of Part I are taken for granted.

In the remainder of this introductory chapter, I'll provide some background on the Passamaquoddy language and its speakers, and outline aspects of data collection and data presentation used in this thesis. Finally, I'll provide a quick outline of each part of the dissertation, summarizing the main points of discussion and core empirical and theoretical conclusions.

1.2 Language background and methodology

1.2.1 The Algonquian language family

The Algonquian language family is one of the largest language families indigenous to North America, stretching from the Rocky Mountains in the west (Blackfoot, Plains Cree) all the way to the east coast (Innu, Mi'kmaq, Passamaquoddy). The Algonquian languages with the greatest number of speakers are Cree, Ojibwe, Blackfoot, and Mi'kmaq. Algonquian is a (large) subgroup of the larger Algic language family, which also includes the languages Wiyot and Yurok in California. According to Pentland (1979: 329), Proto-Algonquian was spoken until approximately 1000 B.C.E.—500 B.C.E., when the languages started to diverge, and Goddard (1994b: 207) places the *urheimat* of Proto-Algonquian somewhere to the west of Lake Superior—though neither of these two conclusions is particularly uncontroversial (especially the second point). A map showing an approximate pre-contact (~1600s) distribution of the Algonquian languages is given in Figure 1-1 (map from Oxford 2023a).

Figure 1-1: Map of Algonquian languages (Oxford 2023a)

The family is generally subdivided into three groups: Plains Algonquian (red), an areal subgrouping; Central Algonquian (green), an areal subgrouping; and Eastern Algonquian (blue), a genetic subgroup. Linguistic characteristics of the family include free word order, proximate-obviative marking on noun phrases (only found elsewhere in Ktunaxa, also known as Kutenai, a language isolate; Dryer 1992, 1997), complex "polysynthetic" verbal morphology, and complex φ agreement systems (including the famous direct-inverse alternation). Algonquian is one of the best-studied language families indigenous to North America, with extensive diachronic, descriptive, and theoretical literature on the family as a whole as well as individual languages (see Pentland and Wolfart 1982, Quinn 2011, Macaulay and Lockwood 2023, and Oxford 2023b for some bibliographies of Algonquian linguistics).

1.2.2 Passamaquoddy

One of the core focuses of this dissertation in Passamaquoddy, one of the few remaining Eastern Algonquian languages that currently has native life-long fluent speakers.[1] A map of the Eastern Algonquian languages showing their approximate pre-contact distribution is provided in Figure 1-2, taken from Oxford (2023a). Passamaquoddy belongs to the Northeastern subbranch of the Eastern Algonquian languages (red on the map), the languages spoken by the five member nations of the Wabanaki Confederacy: (Western) Abenaki, Penobscot (Eastern Abenaki), Passamaquoddy, Wolastoqey (Maliseet), and Mi'kmaq.

Passamaquoddy can be split into two mutually-intelligible dialects: Passamaquoddy, spoken in eastern Maine, and Wolastoqey (also known as Maliseet), spoken in New Brunswick along the Wolastoq (St. John River). Throughout this thesis, I will refer to the language as a whole by the name Passamaquoddy—this should generally be taken to include both Passamaquody and Wolastoqey (unless it's clear from the context that I'm contrasting the two varieties). Passamaquoddy and Wolastoqey are extremely closely related, and there are only a few differences between them, mostly in the domains of phonology, morphology, and lexicon.

1.2.3 Data collection and presentation

The data for this thesis comes from a variety of sources. In addition to data taken from secondary sources, for Passamaquoddy I also make use of the example sentences in the online Passamaqquody dictionary (Francis and Leavitt 2008, `https://pmportal.org/`) as well as primary fieldwork data gathered by standard syntactic and semantic fieldwork methodology (e.g. as outlined by Matthewson 2004). The fieldwork data is either elicited by a translation task, in which the elicitor provides a context and asks the consultant for a translation of the target sentence into the language of study, or a judgment task, in which the elicitor provides a context and asks the consultant whether a particular constructed target sentence in the language of study can be naturally uttered in that context. When deemed necessary (for instance, when looking at semantic data), I will provide the context above the glossed example. However, in cases where I illustrate a morphological or syntactic point, I will leave out the context for space and readability.

The fieldwork data represents the work of several linguists who are current and former members of the MIT Passamaquoddy Workshop, as well as the work and judgments of several Passamaquoddy speakers. The speakers whose language is represented here are, in alphabetical order by last name, along with speaker codes and dialect:

- Margaret Apt (MA), Passamaquoddy from Sipayik (Pleasant Point, ME)
- Cyril Francis (CF), Passamaquoddy from Sipayik (Pleasant Point, ME)
- Edwina Mitchell (EM), Wolastoqey from Neqotkuk (Tobique First Nation, NB), though spent most of her life in Indian Island, ME
- Grace Paul (GP), Passamaquoddy from Sipayik (Pleasant Point, ME)

[1]The others are Mi'kmaq and Munsee Delaware—and, thanks to an ongoing Wampanoag (Massachusett) language reclamation project (fermino 2000, Ash et al. 2001, Hicks 2006, Makepeace 2010, Kelley 2020), there are a few children being raised in the language.

Figure 1-2: Map of Eastern Algonquian languages (Oxford 2023a)

- Roger Paul (RP), Wolastoqey/Passamaquoddy from Neqotkuk (Tobique First Nation, NB) and Motahkomikuk (Indian Township, ME)

- Dwayne Tomah (DT), Passamaquoddy from Sipayik (Pleasant Point, ME)

The majority of fieldwork data here comes from work with Margaret Apt, Edwina Mitchell, Grace Paul, and Roger Paul. The elicitors are, with elicitor codes: myself, Faith Baca (FB), Tanya Bondarenko (TB), Colin Davis (CD), Yadav Gowda (YG), Elise Newman (EN), Dmitry Privoznov (DP), Norvin Richards (NR), and Giovanni Roversi (GR).

To keep track of who elicited what from which speaker, I provide speaker code, date of elicitation, and elicitor code at the end of the translation line of each gloss of each elicited example, in the following format: (SPEAKER CODE, YYYY.MM.DD;ELICITOR CODE). For examples elicited by me (the majority of the fieldwork data in this thesis), I leave out the elicitor code. Two examples of this format can be found below:

(1) a. Context: Your granddaughter is quite young, and tells you that she's scared because there's a clown under her bed. You know that there's no clown there and that she's imagining things. Later, talking to your son, you tell him that his daughter told you that she's scared. He asks why, and you answer:

Copuhtes	yaq	iyu-Ø	neqiw	'-kuhuti-k.
clown	REP	be.at$_{\text{AI}}$-3	below	3-bed-LOC

'A clown is under her bed, I hear.' (RP 2020.06.10)

b.

Pesku-huk	woli-hpuksu-Ø-wok	cikoni-hik.
one-PROX.PL	good-taste$_{\text{AI}}$-3-PROX.PL	apple-PROX.PL

'Some of the apples were tasty.' (GP 2021.05.10;CD)

In (1a), we see a context and the elicited sentence. The tag at the end of the translation line tells us that this sentence was provided and/or judged acceptable in this context by Roger Paul on June 10, 2020, and the lack of elicitor code means that I elicited this example. In (1b), we see an example provided without a context: this one was elicited by Colin Davis on May 10, 2021, working with Grace Paul.

The fieldwork data in this dissertation was collected between June 2020 and August 2023, primarily via weekly 1.5 hour virtual elicitation sessions carried out over Zoom, as well as an in-person field trip to Indian Island, ME and Sipayik (Pleasant Point, ME) in January 2023.

1.3 Plan for the thesis

In this section, I outline the plan for the thesis, summarizing the main empirical and theoretical findings and conclusions.

1.3.1 Background (Chapter 2)

Chapter 2 introduces some background on the grammar of Passamaquoddy, designed for those readers who aren't already familiar with Passamaquoddy or Algonquian. I cover some basics of Passamaquoddy phonology and orthography in order to help readers pronounce the Passamaquoddy example sentences (Section 2.1). I outline descriptively various aspects of nominal and verbal morphology in order to familiarize the reader with the complexities of Algonquian morphology as well as the Algonquianist terminology used to describe it (Section 2.2). I also provide a basic templatic description of the essentials of Passamaquoddy syntax and word order in order to help the reader navigate the many examples to come (Section 2.3). The last two sections of this chapter are more theoretical in nature, discussing the morphosyntax of the inverse (2.4) and obviation (2.5), arguing for two particular analyses that I will assuming in the rest of this dissertation. For the morphology of the inverse, I adopt Oxford's (2017c, 2019b) view that the Algonquian theme sign is just object agreement in Voice, and the inverse theme sign is the default spellout of Voice that occurs when Voice (theme sign) and Infl (central agreement) have agreed with the same goal and Voice undergoes a dissimilatory Impoverishment rule *à la* Kinyalolo's Constraint. For the syntax of the inverse, I adopt Grishin (2022) and Oxford's (2023d) proposal that the speech-act participant inverse (first or second person; SAP), which occurs when a third person acts on an SAP, is to be derived purely morphologically with no syntactic effects, whereas the third person inverse (which optionally occurs when a third person acts on another third person) involves syntactic inversion: the internal argument A moving over the external argument. For obviation, I argue for a kind of dependent accusative case-esque analysis of obviative marking, where obviative is assigned to third person animates that are c-commanded by another third person animate within a phase, and proximate is assigned by default.

Those who are already familiar with Passamaquoddy and Algonquian might be particularly interested in the sections on the inverse (Section 2.4) and obviation (Section 2.5), as in those sections I argue for particular formal analyses of the inverse and obviation which aren't necessarily standard in the Algonquian literature. Additionally, those who are familiar with Algonquian languages but not Passamaquoddy are encouraged to take a look at Section 2.1 to familiarize themselves with Passamaquoddy phonology and orthography.

1.3.2 Part I: CP and clause size (Chapters 3–7)

The first part of this thesis tackles Passamaquoddy CP syntax by examining the syntax of clause typing and clause size. In Passamaquoddy, just like most other Eastern Algonquian languages, there are three main kinds of (non-imperative) verbal inflectional paradigms—the INDEPENDENT, the CONJUNCT, and the SUBORDINATIVE, which I exemplify below for the verb *opu* 'sit':[2]

(2)

	a. **Independent**			b. **Conjunct**			c. **Subordinative**			
	opu	-Ø	-wol	epi	-li	-t	't-	opi	-li	-n
	sit$_{AI}$	-3	-OBV.SG	IC.sit$_{AI}$	-OBV	-3CJ	3-	sit$_{AI}$	-OBV	-N
	's/he$_{OBV}$ sits'			's/he$_{OBV}$ sits'			's/he$_{OBV}$ sits'			

In addition to showing different morphology, each of these verb forms appears in different syntactic contexts, which we can call INDEPENDENT CLAUSES, CONJUNCT CLAUSES, and SUBORDINATIVE

[2]Proto-Algonquian distinguished only independent from conjunct. The central languages and Cheyenne are conservative in this respect, contrasting independent and conjunct but lacking the subordinative, which was an Eastern Algonquian innovation (Goddard 1983). Arapaho and Blackfoot somewhat radically reorganized the Proto-Algonquian clause typing system, and Mi'kmaq lost the independent entirely, having replaced it with the conjunct.

clauses. Each of these three clauses types has its own distinct set of syntactic characteristics and distributional properties—for just a small taste, the independent is found most naturally in out-of-the blue matrix declaratives, the conjunct is found under predicates like *'kocicihtun* 'know' and *assokitahasu* 'be surprised', and subordinative is found in the second conjunct of coordinations where the second conjunct causally and/or temporally follows from the first (all among several other contexts).

The core questions that Part I tackles are the following: What are the differences in the syntactic distribution of each clause type? What syntactic properties are those differences derivative of? How can we break down these apparently uniquely Algonquian clause types into more basic crosslinguistic building blocks?

To answer these questions, Part I is divided into three core chapters. After a short introduction (Chapter 3), Chapter 4 provides a descriptive overview of the morphology and syntactic distribution of each of the three clause types. In doing so, I provide the most exhaustive listing to date of the different kinds of contexts each clause type can show up in. In Chapter 5, I tackle the question of what the core syntactic difference between each clause type are. I argue that the clause types can be distinguish in terms of their structural size, with independent and conjunct clauses being CPs but subordinative clauses being bare TPs. The core data I investigate to make this argument are a number of Ā phenomena associated with the CP layer, and I show that independent and conjunct clauses pattern alike in allowing for CP-level Ā dependencies, whereas subordinative clauses ban them. With variation in clause size thus diagnosed, Chapter 6 seeks to answer the question of how to connect those independent-motivated syntactic differences to the distribution of each clause type. I show that all of the syntactic properties of independent, conjunct, and subordinative clauses in complementation and coordination fall out naturally from Wurmbrand and Lohninger's (2023) Implicational Complementation Hierarchy, which links clause size to complement type, as well as Bjorkman's (2012, 2013) proposal that asymmetric coordination is TP coordination. Chapter 7 concludes.

1.3.3 Part II: C and agreement (Chapters 8–11)

The second part of this thesis examines another aspect of Algonquian CP morphosyntax: cross-family variation in a particular agreement slot in the Algonquian verbal paradigm, the peripheral suffix, which is standardly analyzed as occupying C and reconstructable all the way back to Proto-Algonquian, and investigates what it can tell us about the morphosyntax of φ agreement more generally. There are two puzzling facts about peripheral agreement across Algonquian:

1. In all the languages, it agrees omnivorously with third person—that is, it specifically seeks out third person nominals to agree with. This is unexpected under a view where third person is an absence of person features (Harley and Ritter 2002, Béjar 2003, a.m.o.): what features would peripheral agreement then be seeking out?

2. In approximately half of the language, peripheral agreement shows a preference for agreeing with DPs that are *further away* from C: lowest preference. How do we square this with evidence that Agree is in the general case local?

Additionally, there's an Algonquian-specific question: how do we model the variation we find in peripheral agreement across the family?

Part II tackles these questions in two main chapters, focusing on a representative sample of four languages from across the entire expanse of the family that represent four distinct peripheral agreement patterns: Blackfoot (Plains Algonquian), Ojibwe (Central Algonquian), Passamaquoddy (Eastern Algonquian), and Wampanoag (Eastern Algonquian). After a brief introduction (Chapter 8), Chapter 9 (an expanded version of Grishin 2023b) addresses the issue of third person preference. Once I show that peripheral agreement always probes omnivorously for third person, I argue that this behavior is simply incompatible with a view that third person is underspecified for third person features: we need some kind of specific representation of third person in the syntax (for instance, a privative third person feature [3] or a binary third person feature [−PART]). I show that alternative analyses of the pattern that try to preserve underspecified third person all fail to capture the data, and discuss typological and theoretical ramifications of this conclusion.

Continuing onwards, in Chapter 10 I survey variation across the languages in what happens when there are multiple possible third person goals for C to agree with. While in Blackfoot C simply agrees with the closest third person, in Passamaquoddy, Ojibwe, and Wampanoag C prefers agreeing with *lower* third persons rather than more local ones, with certain differences between the three: while in Passamaquoddy and Wampanoag C can agree with themes of ditransitives, it cannot in Ojibwe; and in Wampanoag (but not Passamaquoddy or Ojibwe) C prefers agreeing with *specific* third persons in a kind of specificity-based differential argument marking. I show that various existing analyses of lowest preference in φ agreement cannot account for Algonquian lowest preference, and propose a novel morphological analysis based on certain patterns in the domain of multiple case marking. Namely, it's possible for a nominal to receive case multiple times but only expone the case it received last—a kind of outcome we can call EXPONE OUTERMOST. I propose that C in Passamaquoddy, Ojibwe, and Wampanoag agrees with *all* accessible matching third person goals in its domain, and simply expones the outermost features it receives—which will be the features of the lowest argument, due to the locality properties of the Agree mechanism. I then propose an account of the cross-Algonquian variation among the lowest-preference languages involving variation in terms of which arguments can shift out of the VP phase into view of C, and finally conclude by discussing various typological and theoretical predictions of the proposed analyses. Chapter 11 concludes.

Chapter 2

Background on Passamaquoddy

Before we proceed any further, it's useful at this point to introduce some relevant background information on Passamaquoddy. I'll first introduce some basics of Passamaquoddy phonology and the standard orthography, before providing an overview of nominal and verbal morphology. I then turn to various syntactic topics that will be useful for understanding the rest of the dissertation: an overview of clause structure and basic syntactic properties, the analysis of the inverse that I will be assuming, and the syntax of obviation.

Unfortunately, a comprehensive reference grammar of Passamaquoddy so far doesn't exist. However, there are a number of places where one can find grammar sketches—I refer the interested reader to Teeter (1971), Sherwood (1983, 1986), LeSourd (1988, 1993), Leavitt (1996), Bruening (2001b), Ng (2002), and Teeter and LeSourd (2007). I should also mention Francis and Leavitt (2008), the Passamaquoddy dictionary, available also in online form with several other useful resources (such as transcribed videos) at https://pmportal.org/.

2.1 Basic phonology and orthography

Here I provide a brief introduction to the basic phonology and orthography of Passamaquoddy. For more detail on various issues in Passamaquoddy phonology, I refer the reader to Szabó (1972a, 1972b, 1979), Teeter and LeSourd (1983), Sherwood (1983, 1986), LeSourd (1988, 1993), Hagstrom (1995, 1997), Ng (1999), Whalen et al. (1999), and Olson (2018).

In Tables 2.1 and 2.2, I provide the inventory of the twelve contrastive consonants and five contrastive vowels found in Passamaquoddy in IPA. The standard orthography is phonemic and generally identical to the IPA. For the few phonemes whose orthographic representation differs from the IPA, I've put the orthography in ⟨angle brackets⟩ in the tables below.

	Labial	Coronal	Palatal	Velar	Labiovelar	Glottal
Stop	p	t	tʃ ⟨c⟩	k	k^w ⟨q⟩	
Fricative		s				h
Nasal	m	n				
Approximant		l	j ⟨y⟩		w	

Table 2.1: Consonants

	Front	Central	Back
[+hi]	i	ə ⟨o⟩[1]	u
[−hi]	e		a

Table 2.2: Vowels

In terms of their surface realizations, the obstruents (maybe excluding /h/) can be either voiced or voiceless (more on the distribution of voiced and voiceless allophones below), whereas the sonorants are always voiced. The lateral /l/ is generally always strongly velarized. The vowel /e/ is often quite low, especially in lengthening environments, and /a/ is usually quite back. In connected speech the peripheral vowels often centralized. Consonant clusters of various kinds (up to CCC[2]) are very common, though one notable restriction is that sonorants can't be a non-initial member of a consonant cluster[3]—see Sherwood (1983, 1986) for more details.

I'd like to describe a few common (morpho)phonological processes that are worth noting, namely obstruent (de)voicing, the behavior of /h/, and the morphophonology of the person prefixes. All the transcriptions in this section below are done by me on the basis of the recordings that can be found in the online dictionary (`https://pmportal.org/`). One other important set of phenomena that I won't discuss here are syncope and stress, which are complicated and have been the subject of much research (LeSourd 1988, 1993, Hagstrom 1995, 1997, Olson 2018). Suffice it to say that there are numerous syncope processes that affect schwas and occasionally other short/reduced vowels, so you should not be worried if certain vowels go missing and reappear again in various examples.

2.1.1 Obstruent (de)voicing

The first and most major phonological process that will affect one's reading of examples is obstruent (de)voicing. Essentially, by default, obstruents are always voiced (or at least extremely unaspirated)—this is true intervocalically, and is often the case at word boundaries as well (though

[1] I only recognize one reduced vowel /ə/, in line with the vast majority of the literature on Passamaquoddy as well as the standard orthography. The notable exception is Sherwood (1983, 1986), who sets up two reduced vowels /ə ă/ (which would both correspond to my /ə/), which derive from Proto-Algonquian short **e* and **a* respectively, essentially just recapitulating diachrony. See LeSourd (1993: §5.2.13, §6.5) for arguments against this approach.

[2] For some speakers, up to CCCh (Phil LeSourd p.c. in Hagstrom 1995, fn. 20).

[3] There are two exceptions to this. The first is that sonorants can be noninitial members of clusters if an underlying schwa has undergone a particular more-or-less optional (though extremely common) "surface level" process of syncope that's not represented orthographically and doesn't feed other phonological processes like obstruent devoicing (LeSourd 1988: 70–71). For instance, *cipokelomu* 'laugh loud' can be realized [dʒɪbəgɛləmu] or [dʒɪbəgɛlmu], as is evidenced by comparing the two pronunciations provided in its online dictionary entry (`https://pmportal.org/dictionary/cipokelomu`). In some cases, as with the morpheme *olomi-* 'away' [əlmi], this process is so common that one might not ever hear [ələmi] except in exceedingly careful speech. Thus, a perhaps more accurate generalization is that /Cə[+son]/ never contrasts with /C[+son]/, whereas /Cə[−son]/ does contrast with /C[−son]/, e.g. *komotu* 'all of a sudden' [gəmədu] vs. *komte* 'sit all the way in' [gəmtɛ]. See LeSourd (1988, 1993), Hagstrom (1995, 1997), and Olson (2018) for more details on vowel syncope, though these works focus on the "deeper" syncope process that *is* represented in the orthography and *does* interact with other phonological processes, like obstruent devoicing and stress assignment. The second exception to the "no non-initial sonorants in clusters" generalization is the person prefixes *n-* '1' and *k-* '2' can create C[+son] clusters. The person prefix behaves exceptionally with regards to the regular phonology in other ways as well, and I discuss them below.

one often finds devoicing at phrase boundaries). In (3), we see the general case:

(3)	a.	*peci-suku*	'approach paddling'	[bɛdʒizugu]
	b.	*tapu*	'two'	[dɑbu]
	c.	*cikones*	'crabapple'	[dʒigənɛz]
	d.	*ketokiku*	'be stingy'	[gɛdəgigu]
	e.	*qaqekinut*	'laundry hamper'	[gʷɑgʷɛginud]

Obstruents are voiceless in consonant clusters. This is true in obstruent-obstruent clusters (4) as well as sonorant-obstruent clusters (5). Strikingly, all glide-obstruent clusters trigger obstruent devoicing (/jC/ clusters are not found in native vocabulary, only in loanwords).

(4)	a.	*atkekte*	'be wrinkled'	[ɑtkɛktɛ]
	b.	*ckuwaptu*	'make tracks toward here'	[tʃkuwʌptu]
	c.	*eqtaqsu*	'stop making noise'	[ɛkʷtɑkʷsu]
	d.	*puscokpe*	'be wet'	[bustʃəkpɛ]
	e.	*apqotuneqsu*	'sleep with mouth open'	[ɑpkʷədunɛkʷsu]

(5)	a.	*emqansis*	'teaspoon'	[ɛmkʷɔnsiz]
	b.	*psonpe*	'be full of liquid'	[psənpɛ]
	c.	*celte*	'be inaccessible'	[dʒɛltɛ]
	d.	*wewcokintu*	'sing in any old way'	[wɛwtʃəgintu]
	e.	*Ceykin*	'Jake'	[dʒejkin]

Geminate obstruents also devoice (6)—these might also reasonably be considered a kind of consonant cluster.

(6)	a.	*cuwappu*	'sit in water'	[dʒuwɑpːu]
	b.	*aputte*	'be turned inside out'	[ɑbutːɛ]
	c.	*accossu*	'change color, ripen'	[ɑtːʃəsːu]
	d.	*nokkaptun*	'carry all of'	[nəkːʌptun]
	e.	*eqqile*	'stop barking'	[ɛkʷːilɛ]

There are a restricted number of exceptions to these rules having to do with the person prefixes, which we'll talk about shortly.

2.1.2 /h/

The behavior of /h/ is also worth mentioning. When intervocalic, there is a constraint that forces both vowels on either side of /h/ to be identical. When it's possible to tell, we can identify that the post-/h/ vowel determines the quality of the pre-/h/ vowel. We can see this quite dramatically in verbs that end in /Vh/, like *'kikahal* 'heal':[4]

[4]This is fed by other processes that change vowel quality, like the one that lowers /ɛ/ to [æ] before /hC/. Thus, *sqehehs* 'female bird' is realized [skʷæhæːs] rather than *[skʷɛhæːs].

(7)	a.	*kikihit*	‘if she cures me’	[gigihid]
	b.	*kikeheq*	‘if y’all sure her’	[gigɛhɛgʷ]
	c.	*kikahat*	‘if she cures her’	[gigɑhɑd]
	d.	*kikohot*	‘if you cure her’	[gigəhəd]
	e.	*kikuhut*	‘if she is cured’	[giguhud]

Notably, /h/ also productively appears as the final element in a consonant cluster (it cannot be a medial segment in a consonant cluster—underlying /C_1hC_2/ clusters are simplified to /C_1C_2/). This feeds obstruent devoicing. When /h/ follows a stop word-initially (as far as I'm aware, the only attested initial stop-/h/ cluster is /kh/), it's typically realized as strong aspiration (and devoices the stop, as expected from a consonant cluster), though it can also occasionally cause a harmonic vowel to appear breaking up the cluster (i.e. /ChV_1/ becomes /CV_1hV_1/)—interestingly, this vowel insertion process doesn't feed consonant voicing.

(8)	a.	*ciphucu*	‘stand looking frightened’	[dʒɪphudʒu]
	b.	*athusoss*	‘snake’	[ɑthuzəsː]
	c.	*mochikewiw*	‘(clock) keep poor time’	[mətʃhigewɪw]
	d.	*sakhaqhe*	‘(odor) come forth’	[zɑkhɑkʷhɛ]
	e.	*khakon*	‘door’	[kʰɑgən] or [kɑhɑgən] (careful speech)
	f.	*moshun*	‘her heart’	[məshun]
	g.	*kinhoke*	‘be pregnant’	[gɪnhəkɛ]
	h.	*alhom*	‘swim (around)’	[ɑlhəm]
	i.	*kiwhos*	‘muskrat’	[gɪwhəz]

Finally, /h/ also underlyingly occurs in /hC/ clusters. However, the surface realization of this cluster is somewhat complex: it involves lengthening the preceding vowel and devoicing the following obstruent. Additionally, this lengthening causes /e/ to lower quite noticeably to [æː].[5] Notably, there isn't any obvious trace of an [h] (except perhaps as very short anticipatory devoicing at the very end of the preceding vowel). However, we can tell that the /h/ is underlying (at least in some cases) because it can systematically alternate with clear intervocalic /h/, like in *'tomtehmon* ‘chop it’ [təmtæːmən] versus *tomtihike* ‘chop things’ [dəmtihigɛ], where in the first case the root *tomteh-* ‘chop’ has been suffixed with *-(o)mon* to create a transitive verb with an inanimate object, and in the second with *-ike* to create an intransitive verb with a generic object.

(9)	a.	*ahpap*	‘rope’	[ɑːpʌb]
	b.	*pahkakuhtak*	‘in the back yard’	[bɑːkɑguːtʌg]
	c.	*cehcoloqs*	‘gland (in throat)’	[dʒæːtʃələkʷs]
	d.	*ehqahkomiksu*	‘stop sinning’	[æːkʷɑːk(ə)mɪksu]
	e.	*ahsitahasu*	‘be convinced’	[ɑːsidʌhʌzu]
	f.	*nahnakon*	‘be light in weight’	[nɑːnɑgən]
	g.	*nihluweyuwal*	‘make trouble for’	[niːluwejuwɑl]

[5]In Passamaquoddy, this lowering only generally occurs before /h/. However, in Wolastoqey, all long /e/ are noticeably lowered, even when not preceding /h/.

2.1.3 Person prefixes

I have been hinting so far that the person prefixes are subject to some unusual phonological behavior—let's address them now. There are three person prefixes, which appear on verbs to mark agreement with various arguments and on nouns for possessor agreement. We will be seeing them very often, so it's worth understanding their morphophonology (and their orthographic representation). There are three person prefixes, corresponding to the three persons:

(10) a. *n-*, *nt-*: first person
b. *k-*, *kt-*: second person
c. *'-*, *'t-*, *w-*: third person

Notably, each prefix has a /t/-less and a /t/-full allomorph—in general, the /t/-less allomorph appears before consonants, and the /t/-full allomorph appears before vowels. Let's take a closer look at each prefix each in turn, starting from third person.

The third person prefix has three allomorphs, *'-*, *'t-*, and *w-*. The apostrophe is the standard orthographic representation of unexpected word-initial obstruent devoicing. Thus, the *'-* allomorph of the third person prefix is purely suprasegmental, realized only by the fact that it prevents initial obstruents from voicing.[6] Generally, the allomorph *'-* appears before obstruents, *'t-* appears before vowels, and the third person prefix disappears before (non-vowel) sonorants. The allomorph *w-* is restricted to a subset of the class of DEPENDENT NOUNS, inalienably possessed/relational nouns—those that begin in /i ə/. For these nouns, *w-* supplants the allomorph *'t-* in appearing before vowels. Finally, for words that begin with /wə/, the third person prefix causes those segments to coalesce to [u] (this coalescence also occurs with the other prefixes).[7]

(11)	a.	*'(t)-* '3' + *-kat*	'foot'	= *'kat*	'her foot'	[kʌd]
	b.	*'(t)-* '3' + *okihkatomon*	'plant it'	= *'tokihkatomon*	'she plants it'	[təgiːkɑdəmən]
	c.	*'(t)-* '3' + *nomihtun*	'see it'	= *nomihtun*	'she sees it'	[nəmiːtun]
	d.	*'(t)-* '3' + *-ipit*	'tooth'	= *wipit*	'her tooth'	[wɪbɪd]
	e.	*'(t)-* '3' + *wolihtun*	'clean it'	= *ulihtun*	'she cleans it'	[uliːtun]

In glosses, when the third person prefix doesn't surface overtly, I will segment it out with the null sign Ø-, as follows:

[6] The apostrophe/devoicing derives from historic initial /wC/ that has since dropped the initial glide. The third person prefix comes from the Proto-Algonquian third person prefix **we(t)-* (the first and second person prefixes are, respectively, **ne(t)-* and **ke(t)-*.). The vowel in these suffixes was lost as part of regular syncope processes in Passamaquoddy, resulting in the prefixes *n-*, *nt-* '1', *k-*, *kt-* '2', and *w-*, *wt-* '3', which were the shapes of these prefixes at the turn of the 20th century (Chamberlain 1899, Prince 1914). The /w/ in the third person prefixes subsequently devoiced in clusters, as reported by Teeter (1971): "with w-, the prefix itself is unvoiced" (Teeter 1971: 196). By the late 70s, the /w/ in the third person prefixes had generally been lost (Sherwood 1983: 47–48), though with some amount of optionality, both age-graded as well as positionally-conditioned, with /w/ preserved most often when following words ending in vowels (LeSourd 1988: 173–174, 410–413). By the end of the 20th century, only the oldest speakers occasionally realized the /w/ in prefixes (Bruening 2001b: 27), and the current speakers I've worked with never produce the /w/.

[7] For some speakers, the third person prefix only optionally causes /wə/ to coalesce to [u]—those speakers will sometimes thus realize the third person singular subject form of 'clean it' as *wolihtun* [wəliːtun]. This failure of coalescence only occurs with the third person prefix—the first and second person prefixes always reliably trigger coalescence.

(12) a. Ø-moshun
3-heart
'her heart'

b. Ø-ulihtu-n
3-clean$_{\text{TI}}$-N
'she cleans it'

The second person prefix contains a /k/. Generally, the allomorph *k-* appears before consonants, *kt-* appears before vowels, and the second person prefix is only realized as devoicing (written '-, as with the third person prefix) when preceding /k kʷ/. Again, (most) dependent nouns that begin in /i ə/ behave exceptionally in not triggering the usual *kt-* allomorph—rather, they also take the /t/-less *k-* allomorph. Just like with the third person prefix, words beginning with /wə/ trigger coalescence to [u] (which does not feed allomorph choice—we still get the pre-C allomorph *k-*).

(13)	a.	*k(t)-* '2' + *nomihtun*	'see it'	= *knomihtun*	'you see it'	[knəmiːtun]
	b.	*k(t)-* '2' + *-olamiptin*	'palm'	= *ktolamiptin*	'your palm'	[ktəlɑmɪptɪn]
	c.	*k(t)-* '2' + *kiskomon*	'can drive it'	= *'kiskomon*	'you can drive it'	[kɪskəmən]
	d.	*k(t)-* '2' + *-itap*	'friend'	= *kitap*	'your friend'	[gidɑb]
	e.	*k(t)-* '2' + *woli-kiseht(i)*	'do well'	= *kuli-kiseht*	'good job!'	[guligizæːt]

The first person prefix contains an /n/. Generally, the allomorph *n-* appears before consonants (optionally assimilating in place to following obstruents), *nt-* appears before vowels, and the first person prefix disappears before /n/. Just like with the second person prefix, dependent nouns that begin in /i ə/ are an exception: there, *n-* also appears before vowels, and you don't get the *nt-* allomorph at all. Strikingly, clusters containing the first person prefix exceptionally do not trigger obstruent devoicing—this is the one exception to the rule that obstruents are always devoiced in consonant clusters. Again, words beginning in /wə/ undergo coalescence to [u] under prefixation, again not feeding allomorph choice.

(14)	a.	*n(t)-* '1' + *-qoss*	'son'	= *nqoss*	'my son'	[ŋgʷʊsː]
	b.	*n(t)-* '1' + *optan*	'coat'	= *ntoptan*	'my coat'	[ndɔptɑn]
	c.	*n(t)-* '1' + *nomihtun*	'see it'	= *nomihtun*	'I see it'	[nəmiːtun]
	d.	*n(t)-* '1' + *-itap*	'friend'	= *nitap*	'my friend'	[nidɑb]
	e.	*n(t)-* '1' + *wolitahas(i)*	'be happy'	= *nulitahas*	'I am happy'	[nulidɑhɑz]

In glosses, when the first person prefix doesn't surface overtly, I will segment it out with the null sign *Ø-*, as follows:

(15) Ø-nikihq
1-parent
'my parent'

One final important note about the person prefixes is that they're undergoing a change in progress: the person prefixes are gradually being lost, a process already noticed by Teeter (1971):

"Interestingly…it [is] in principle possible to dispense with direct phonetic representation of the prefixes in most cases, and the possibility is widely exploited in ordinary inexplicit speech" (Teeter 1971: 196). All of the speakers that I've worked with can and often will drop both *n-* '1' as well as *k-* '2', with those of the youngest generation of L1 speakers dropping the prefixes the most often. However, the effect on the voicing of following obstruents is preserved, and thus you get a contrast between a voiced obstruent for first person and a voiceless obstruent for second and third. Nevertheless, given that this is still optional (though very common), and speakers recognize the prefixed forms and are able to use them, I will always put prefixes in my transcriptions, assuming that they are there underlyingly, even if they might not have actually been produced.[8]

2.2 Nominal and verbal morphology

In this section, I give a brief introduction to the basics of nominal and verbal morphology, to facilitate the reading and understanding of the word forms and sentences that we will be looking at, as well as their glossing. I provide a more-or-less surface level, descriptive templatic analysis of nominal and verbal morphology, designed primarily as an aide and reference for readers unfamiliar with Algonquian morphology.

2.2.1 Nominal morphology

Passamaquoddy nouns inflect for number, animacy, and obviation, as well as the number and person of their possessors. Additionally, nouns can be inflected for locative case. There is also a category of "absentivity" that nouns can inflect for, which marks that a particular referent is gone from some location or has passed away. I won't discuss absentative inflection in any detail here, as it won't come up in the remainder of this dissertation—for more information, see Sherwood (1986), LeSourd (1993), Leavitt (1996), and Francis and Leavitt (2008). In (16), I provide a simplified template for nominal inflection. For more information, see Francis and Leavitt (2008: 638–639), LeSourd (1993: §2.4) and Leavitt (1996: §4.1).

(16) *Nominal template:*
prefix – stem – possessed theme sign – central suffix – { peripheral suffix, locative }

The peripheral suffix marks the number, animacy, and obviation of the noun, and the prefix and central suffix work together to index the person and number of the possessor (if there is one).

[8] An interesting consequence of the gradual loss of person prefixes is occasionally speakers use person prefixes in an innovative way in 1⟶2 verb forms. These verb forms conservatively always use the second person prefix *k-*, but you can occasionally find speakers using *n-* instead:

(i) a. '-Koti= wikhomu-l. Conservative form: second person *k-*
2-going.to= write.to$_{TA}$-2OBJ
'I'm going to write to you.'

b. N-koti= wikhomu-l. Innovative form: first person *n-*
1-going.to= write.to$_{TA}$-2OBJ
'I'm going to write to you.' (EM 2022.12.21)

I have not noticed a similar phenomenon in any other forms, only those involving a first person acting on a second.

Some (but not all) nouns also require an additional marker, the "possessed theme sign", in order to be possessed; it's unclear to me what kinds of generalizations govern the presence/absence of the possessed theme sign. Note also that stems are often morphologically complex, but I will generally not decompose stem-forming derivational morphology. Below, I provide some example maximally-inflected forms of the inanimate noun *qaqekinut* 'laundry hamper'[9] and the animate noun *cihkonaqc* 'turtle':

(17) a.

n-	qaqekinute	-m	-onnu	-l
1-	hamper	-POSS	-1PL	-IN.PL
prefix	stem	possessed theme sign	central suffix	peripheral suffix

'our laundry hampers'

b.

n-	qaqekinute	-m	-onnu	-k
1-	hamper	-POSS	-1PL	-LOC
prefix	stem	possessed theme sign	central suffix	peripheral suffix

'in our laundry hamper'

(18) a.

'-	cihkonaqc	-om	-uwa	-l
3-	turtle	-POSS	-PL	-OBV.SG
prefix	stem	possessed theme sign	central suffix	peripheral suffix

'their turtle (OBV)'

b.

'-	cihkonaqc	-om	-uwa	-k
3-	turtle	-POSS	-PL	-LOC
prefix	stem	possessed theme sign	central suffix	peripheral suffix

'on their turtle'

We can see that the possessed them sign is *-(o)m*, with the schwa appearing when suffixed to a consonant, and the schwa-less form surfacing when suffixed to a vowel. The prefix and central suffix work together to index the person and number of the possessor, with the prefix marking person and the suffix further specifying the number. At the right edge we find the peripheral suffix, marking the number, animacy, and obviation of the noun, or the locative suffix.

The forms of the prefix and central suffix for each person-number combination are provided in Table 2.3. I use 21, following common Algonquianist convention, to indicate first person inclusive.

	SG		PL	
1	n(t)-	-Ø	n(t)-	-(o)n((n)u)
21			k(t)-	-(o)n((n)u)
2	k(t)-	-Ø	k(t)-	-(u)wa
3	'(t)-	-Ø	'(t)-	-(u)wa

Table 2.3: Central suffix (nouns)

[9] As an illustration of the kind of derivational morphology we can see on nouns, *qaqekinut* 'laundry hamper' is composed of the initial *qaq-* 'dirty', the medial *-ek-* 'cloth, paper', and the nominalizing final *-inut(e)*, which denotes containers. Thus, *qaqekinut* is more literally 'container for dirty clothes'.

As is evident, there are actually only a few morphemes here that compositionally combine to result in the full set of person-number distinctions. We have our standard person prefixes, *n(t)-* '1', *k(t)-* '2', and *'(t)-* '3', supplemented by two plural markers in the central suffix slot: *-(o)n((n)u)* '1PL', which appears with first person exclusive and inclusive, as well as the elsewhere *-(u)wa* 'PL', which appears with second and third person. There are no central suffixes for singular possessors.

The allomorphy of the person prefixes has already been discussed in Section 2.1.3, but we haven't looked at the allomorphy of the central suffixes. For the 1PL suffix, we can find *-(o)n*, *-(o)nu*, and *-(o)nnu*. The distribution of the initial schwa is determined by when the suffix follows a vowel (no schwa) or a consonant (schwa). The *-(o)n* form is found word-finally, and the *-(o)nu* and *-(o)nnu* forms are found preceding an overt peripheral suffix. It's not clear to me what (if anything) regulates the choice between singleton *n* and geminate *nn* forms of this suffix. For the elsewhere plural suffix, the distribution of *-wa* and *-uwa* is similarly determined by the preceding segment: we get *-wa* following vowels and *-uwa* following consonants.

Next, let's turn to the peripheral suffix, the forms of which are provided in Table 2.4. Inanimate and proximate singular are unmarked. Inanimate plural and obviative singular are marked with a suffix *-(o)l*,[10] proximate plural is marked with *-(o)k*, and obviative plural is marked with a low pitch accent that docks onto the rightmost underlying vowel of the word, which can bleed final vowel deletion.

	IN	PROX	OBV
SG	*-Ø*	*-Ø*	*-(o)l*
PL	*-(o)l*	*-(o)k*	-\`

Table 2.4: Peripheral suffix

The schwa in *-(o)l* and *-(o)k* has a somewhat unusual distribution. It's always present following consonants, and it's also present following the vowels /i e u/ (there are no morphemes that clearly underlyingly end in schwa, as far as I am aware), with the hiatus resolved by regular hiatus resolution rules (glide insertion, occasionally accompanied by schwa raising). The one exception is when *-(o)l* and *-(o)k* are suffixed to final /a/, in which case the schwa deletes. Compare *sihpac(u)* 'pail', *opos(i)* 'stick, tree', and *pik(e)* 'rib' to *puhtay(a)* 'bottle':

(19)
a. *sihpac(u)* 'pail' + *-ok* 'PROX.PL' = *sihpacuwok* 'pails$_{\text{PROX}}$'
b. *opos(i)* 'stick' + *-ok* 'PROX.PL' = *oposiyik* 'sticks$_{\text{PROX}}$'
c. *pik(e)* 'rib' + *-ok* 'PROX.PL' = *pikiyik* 'ribs$_{\text{PROX}}$'
d. *puhtay(a)* 'bottle' + *-ok* 'PROX.PL' = *puhtayak* 'bottles$_{\text{PROX}}$'

As is evident, the schwa is preserved in the first three cases, but disappears in the last.

I should say a few words on animacy and obviation. Algonquian languages—Passamaquoddy is no exception—distinguish between two noun classes, ANIMATE and INANIMATE. These two noun classes are identifiable based on nominal morphology (as illustrated by the peripheral suffix), concord on nominal modifiers, as well as verbal agreement morphology:

[10] This is a robust metasyncretism in Passamaquoddy. It is found in several other Algonquian languages as well, and can be reconstructed back to Proto-Algonquian. See Piriyawiboon (2007) and Bliss and Oxford (2016, 2017) for discussion.

(20) a. Kinkihqon-Ø-ul nihtol nison-ul pileya-l papskoti-yil.
be.big$_{\text{II}}$-3-IN.PL that.IN.PL two.IN-IN.PL new-IN.PL stove-IN.PL
'Those two new stoves are big.' (constructed)

b. Kinkil-Ø-ok niktok nisu-wok pileya-k psuwis-ok.
be.big$_{\text{AI}}$-3-PROX.PL that.PROX.PL two.AN-PROX.PL new-PROX.PL cat-PROX.PL
'Those two new cats are big.' (constructed)

The verbs used, *kinkihqon* 'it$_{\text{IN}}$ is big' and *kinkil* 'she$_{\text{AN}}$ is big', differ based on animacy, as well as the verbal agreement suffixes. Additionally, demonstratives, adnominal numerals, and (phonologically independent) adnominal modifiers concord for the animacy of the noun (as well as its number and obviation).

The grammatical category of animacy is loosely correlated with notional animacy. Namely, the vast majority of notionally animate nouns, nouns denoting referents that are capable of exerting agency and showing some degree of sentience, with very few (to no) exceptions are all grammatically animate. However, notionally inanimate nouns are split between both noun classes. For more detailed discussion of the category of animacy in Algonquian, see Dahlstrom (1995), Goddard (2002), and Quinn (2019).

Obviation in Passamaquoddy divides the category of *animate* third person into two groups: the proximates and the obviatives. Inanimates do not show a proximate-obviative contrast.[11] Descriptively, proximate DPs are the "highlighted" or "prominent" third person referent, whereas obviative DPs are backgrounded in some sense. There can only ever be one proximate within a given domain. I leave more detailed discussion of obviation to Section 2.5 below, once we've established some background on Passamaquoddy syntax.

2.2.2 Verbal morphology

In this section, I provide an overview of Passamaquoddy verbal morphology, focusing on the basics of verb stem structure, and outlining how the verbal agreement system works. We'll build outwards, first looking at stem structure and then going out to successively higher agreement slots: the THEME SIGN (Voice), CENTRAL AGREEMENT (Infl), and PERIPHERAL AGREEMENT (C). I will not address the morphology of negation or tense here, as they will not be important for the discussion in the rest of the thesis. Below is a summary of the verbal template (a tree summarizing the position of each slot in the clausal template will be presented in (34)):

(21) a. *Verbal template*
prefix – complex stem – theme sign – NEG – central suffix – tense – peripheral suffix

b. *Complex stem template*
(preverb*) = [$_{\text{stem}}$ initial – (medial) – final]

[11] In some Algonquian languages, inanimates also show a proximate-obviative distinction, where in most languages this is revealed only on verbal agreement morphology and not on the nominal peripheral suffix (e.g. conservative dialects of Ojibwe and Cree, among others) whereas in other languages inanimate nominal morphology has also developed an overt contrast for obviation, with the inanimate obviative marker historically deriving from a Proto-Algonquian suffix **-(e)liw* (Pentland 1999: 227) indicating an obviative possessor (e.g. Oji-Cree, Algonquin, Moose Cree, East Cree, and Innu).

Additionally, we can identify various different non-imperative verbal inflectional paradigms/clause types (along the lines of Indo-European indicative/subjunctive/infinitive): the independent, the conjunct, and the subordinative. In this section, I will discuss their differences with respect to each agreement slot. See also Section 4.1 for more discussion of the morphological properties of each of these inflectional paradigms.

Stem structure

Here I introduce the basics of Algonquian—and by extension Passamaquoddy—verb stem structure, in order to familiarize the reader with some of the terms and concepts that I will be using throughout this dissertation. This section is necessarily brief and surface-level—the stem structure of Algonquian verbs has received a great deal of attention in the literature, both descriptive and theoretical; see Bloomfield (1946, 1957, 1962), Wolfart (1973), Denny and Mailhot (1976), Denny (1978, 1984), Inglis (1986), Goddard (1988, 1990b), O'Meara (1990, 1995), Valentine (2001), Brittain (2003), Hirose (2003), Branigan et al. (2005), Bakker (2006), Mathieu (2007a, 2007b), Armoskaite (2011), Slavin (2012a, 2012b, 2015, 2017), McCulloch (2013), Johnson and Rosen (2017), Mathieu et al. (2017), Friesen and Denny (2019), Riccomini (2019), Schmirler et al. (2019), Sylliboy et al. (2019), Friesen (2022), Branigan (2023), and Sylliboy et al. (2023), among others.

The descriptive template for the Algonquian verb stem, well established since Bloomfield (1946), is composed of the verb stem proper, consisting of an initial, an optional medial, and a final, and optionally preceded by any number of preverbs, as depicted below and exemplified with Passamaquoddy verb *nokka-siqalokonal* ‘‘take all the money from s.o.'s pockets, empty s.o.'s pockets completely':

(22) a. (preverb*) = $[_{\text{stem}}$ initial – (medial) – final]

b.	nokka	=	$[_{\text{stem}}$	siq	–	alok	–	on]
	completely			empty		hole		by.hand$_{\text{TA}}$
	preverb			initial		medial		final

‘take all the money from s.o.'s pockets, empty s.o.'s pockets completely'

https://pmportal.org/dictionary/nokka-siqalokonal

Each of these terms refers to a particular slot in the verbal template. The elements that can occupy each slot can be themselves morphologically complex—this will not be relevant for us here. Below, I give a brief description of each slot and what kinds of items can go in each of them:

- **Finals**

  Finals are found at the right edge of the verb stem, and are obligatory on each verb. They convey the transitivity of the verb, as well as the animacy of the intransitive subject and transitive object. Traditionally, they are divided into the following classes, based on transitivity and animacy: Inanimate Intransitive (II), Animate Intransitive (AI), Transitive Inanimate (TI), and Transitive Animate (TA). Certain finals are more semantically bleached than others, the abstract finals, whereas others have more concrete lexical meanings, the concrete finals, like *-(o)n* ‘TA, by hand' or *-(o)cihte* ‘II, be colored'. There are also occasionally mismatches between the transitivity specified by the final and the actual valence of the verb—there are AI+O verbs, which have AI finals but nevertheless take an object (which must be third person), as well as TI-O verbs, which have TI finals but do not take an object. Certain finals can be recursively added to pre-existing verb stems (which already have finals of their own) to generate new verb stems—the finals that have this property are traditionally called secondary finals. Two important ones, which are used for deriving all ditransitive verbs (except for those built off of the stem *mil-* 'give', which is already ditransitive by itself), are the applicative markers *-(u)w* (more common) and *-ew*. Ditransitive verbs are traditionally given the abbreviation TA+O, as the recipient argument must be animate. Following much of the existing theoretical literature (e.g. Brittain 2003, Hirose 2003, Mathieu 2007b, Ritter and Rosen 2010, Slavin 2012b, a.m.o.), I treat finals as instantiations of the categorizing head *v* (with the exception of secondary finals, which may instantiate higher heads like Appl).

- **Medials**

  Medials are optional, and consist of incorporated noun roots. In the general case, they do not obviously correspond to any free nominal root. Medials generally seem to have a classificatory function, specifying various properties of internal arguments or instruments, like *-ek-* 'sheetlike', *-atok-* 'stringlike', *-ocok-* 'soft, squishy stuff', *-ahq-* 'stick, tree', and *-atpe-* 'head', among many others.

- **Initials and preverbs**

  The initial and preverb slots can be occupied by a single set of items, a set which is tremendously diverse, both semantically as well as syntactically. The majority of initials and preverbs are modifiers, like *cipoki-* 'scary' and *moci-* 'dirty, evil', but this class also contains directional descriptors like *pomi-* 'along' and *sakhi-* 'coming into view', aspectual markers like *mace-* 'starting' and *(o)toli-* 'progressive', and modals like *(ah)cuwi-* 'must' and *(nih)tawi-* 'know how'. The difference between preverbs and initials refers to their position in the verbal template and their morphophonological properties: there can be at most one initial in a stem, and all others must be preverbs. Additionally, vowel hiatus is not tolerated at the right edge of initials, but it is at the right edge of preverbs. Interestingly, independent syntactic material can intervene between preverbs and the rest of the verb stem, most commonly second-position clitics as well as pronouns, demonstratives, and quantifiers, though occasionally we can find full DPs and adverbs splitting up a complex verb stem as well.[12]

[12]Some examples:

(i) a.

N-koti=	**nil**	'cihtihik	sepawonuk.
1-going.to=	**1SG**	win$_{\text{AI}}$	tomorrow

'I'm going to win tomorrow.' (GP, RP 2021.05.24)

b.

Wihqaci=	**Piyel**	mili=	papehcikesu-Ø.
enjoy=	**Peter**	diverse=	ask.question$_{\text{AI}}$-3

'Peter likes to ask a lot of questions.' (EM 2021.10.06)

c.

'-Kisi=	**=te**	**tokec**	nuta-ha	qocomok	naka	k-nat-ahya-n.
2-can=	**=EMPH**	**now**	out-go$_{\text{AI}}$	outside	and	2-go-play$_{\text{AI}}$-N

'Now you can go outside and play.' (GP 2020.07.08)

One important class of initials and preverbs are the so-called RELATIVE ROOTS, (Bruening 2001b: §3.4, 2004, 2006, Rhodes 2006, 2010a, 2010b, Dahlstrom 2014, Branigan and Brittain 2016, Kim 2020, Gong 2022, a.o.), which are verbal morphemes that grammatically introduce certain kinds of oblique arguments, like Passamaquoddy *(o)li-* 'thus, (to) there' which introduces a manner or locative/directional phrase, *(wo)ci* 'from, because' which introduces direction from or a rationale phrase, and *tuci-* 'along, much' which introduces a locative or degree phrase, among several others. The phrase that a relative root introduces is called a RELATIVE ROOT COMPLEMENT. Historically, relative roots likely emerged from rebracketing postpositions as part of the verb (Rhodes 2006, Oxford 2016), and thus bear a striking similarity to Germanic particle verbs. Below, I provide some examples, bolding the relative roots and underlining the relative root complements:

(23) Examples of relative roots in Passamaquoddy

a. Sahti-yil **li=** kisi-kon-Ø-ul yuta.
blueberry-IN.PL **there=** can-grow$_{\text{II}}$-3-IN.PL here.EMPH
'Blueberries can grow (right) here.' (GP 2020.06.24)

b. Nt-otol-askuwy-a-n mus **Ø-uci=** nuta-ha-n kcihku-k.
1-PROG-wait.for$_{\text{TA}}$-3OBJ-1PL moose **3-from=** out-go$_{\text{AI}}$-N forest-LOC
'We're waiting for the moose to come out of the woods.' (EM 2023.02.28;EN)

c. '-**Tuci**-taham-a-l '-temis-ol tahalu nisuwihtic-il.
3-**much**-think$_{\text{AI}}$-3OBJ-OBV.SG 3-dog-OBV.SG as partner-OBV.SG
'He likes his dog as much as his wife.' https://pmportal.org/dictionary/tucitahamal

Occasionally, it also appears possible for a verb to agree with a relative root complement, as argued by Goddard (2020) for Unami Delaware; when this happens the so-called "N formative" *-(o)n(e)* (which I simply gloss 'N') appears (unless you have an II verb), and the peripheral suffix indexes the relative root complement. We can illustrate with Passamaquoddy below:

(24) a. Meste sesomi=te nt-**oli**-ya-w-on-**Ø** Kehlis-k.
not.yet at.all=EMPH 1-**there**-go$_{\text{AI}}$-NEG-N-**IN.SG** Calais-LOC
'I haven't ever been to Calais.' (GP, DT 2023.01.25)

b. Nil=te=na nt-**oloqi**-ya-n-**ol**.
1SG=EMPH=ADD 1-**toward**-go$_{\text{AI}}$-N-**IN.PL**
'I also went to those places.' (GP, MA 2023.03.07;NR)

However, this is not too common, and normally relative root complements remain unindexed (perhaps with the exception of *wh*-extracting the *wh* item *tan* 'what, how' when it is a relative root complement, which I argue *must* be agreed with by the verb—see Chapter 5).

Inflectional morphology—mostly consisting of agreement markers, as well as verbal negation marking and tense marking—appears outside of the verb stem, both to the left and the right. For the rest of this dissertation, it will prove very useful to understand the three main sites of agreement: the THEME SIGN (Voice), CENTRAL AGREEMENT (Infl), and PERIPHERAL AGREEMENT (C). I turn to these topics next.

Theme sign (Voice)

The THEME SIGN is the agreement suffix that appears right after the verb stem in TA verbs (it does not show up in intransitives or TI verbs), and it can host one of the following five suffixes in Table 2.5:

1OBJ	2OBJ	3OBJ	INV	INV.X
-i	*-ol, -os*	*-(a)*	*-oku, -oq*	*-oke*

Table 2.5: Passamaquoddy theme signs

It is by now standard, especially in the formal literature, to treat the theme sign as a kind of object agreement marker (Goddard 1979b, 2007, Rhodes 1976, Brittain 1999, McGinnis 1999, Oxford 2014, 2017c, 2019b, Thivierge 2016, 2017, Despić and Hamilton 2018, Lewis 2019, and Bondarenko 2020, a.o.)—I follow this insight here, as illustrated by my glosses of each theme sign. Thus, in the theme sign slot we either find agreement with the (highest) object or, in certain contexts, an inverse marker (which contexts the inverse appears in is discussed in more detail in Section 2.4).

The theme sign *-i* marks a first person (exclusive) object, the theme sign *-ol* marks a second person or first person inclusive object (with an allomorph *-os* when preceding *-k* '3CJ'), and the theme sign *-a* marks a third person object (with a null allomorph when followed by a vowel-initial suffix). There are two inverse markers: default *-oku* (with a word-final allomorph *-oq*), and *-oke*, used in the *unspecified subject* construction, which is either a kind of short passive or an impersonal agent construction.

In terms of where in the clausal spine to place the theme sign, I follow the growing generative Algonquianist consensus it putting it in Voice (corresponding to *v* in certain models), as proposed by Bruening (2001b), Béjar and Rezac (2009), Lochbihler (2012), Coon and Bale (2014), Despić and Hamilton (2018), Oxford (2017c, 2019b), and Bondarenko (2020), among others. This allows for a very simple analysis of the theme sign as simply a probe in Voice agreeing with the closest goal, which will always be the highest object. For a verb form like *k-mil-i-n-ol* '2-give$_{\text{TA+O}}$-1OBJ-N-IN.PL, you gave them to me', Voice will simply probe down and find the highest object—here the first person recipient—and agree with it.

The exponents of the theme sign are identical across clause types, though the particular distribution of each theme sign differs. In the independent and subordinative, we get inverse marking in 3⟶SAP scenarios as well as 3OBV⟶3PROX, 3IN⟶3AN, and X⟶3 (with X standing for an impersonal agent). In contrast, in the conjunct, inverse marking does not appear in 3⟶SAP scenarios at all, though it does appear in all the other inverse contexts. For more discussion, see Sections 2.4 and 4.1, as well as Oxford (2022).

Central agreement (Infl)

Going one step up, we get to what we can call CENTRAL AGREEMENT, which is realized by the PERSON PREFIX (in the independent and subordinative) combined with the CENTRAL SUFFIX (in all three verbal paradigms). In the Passamaquoddy independent verb form below, I bold central agreement (note that first person inclusive is transparently composed of a second person prefix and first person pluralizer suffix):

(25) **k-** supehl -a **-nnu** -k
2- pet$_{\text{TA}}$ -3OBJ **-1PL** -PROX.PL
'we$_{\text{INC}}$ pet them'

Which argument(s) central agreement indexes is hierarchically-driven: generally, central agreement will index the argument highest on the hierarchy SAP>3PROX>3OBV. This is an oversimplification and by no means a full description of its behavior; see Sherwood (1983, 1986), Francis and Leavitt (2008), and Bondarenko (2020) for more detailed information on Passamaquoddy verbal agreement. I do not provide a full analysis of central agreement in this thesis, so this simplified surface-level description will suffice for our purposes.

Here, I follow Oxford (2017c, 2019b, 2019a) and Hammerly (2020, 2021) in treating the prefix and central suffix in the independent (and subordinative) as a discontinuous exponent of a single head, derived via a morphological process like Fission (Noyer 1992). On this, it's worth noting that the exponent of person is a prefix and the exponent of number is a suffix, in line with typological tendencies (Harbour 2008). The insight that the prefix and central suffix function together as a single unit goes back at least to Goddard (1979b), who writes that "[t]he combination of a pronominal prefix (if any) and a central ending constitutes a <u>central-participant marker</u>, which specifies the pronominal category of the central participant" (Goddard 1979b: 104).

This conclusion stands in opposition to the general consensus in the generative Algonquian literature, which typically treats the person prefix and central suffix as exponing two distinct heads (e.g. Halle and Marantz 1993, McGinnis 1995, Brittain 2001, Richards 2004, Cook 2014, Oxford 2014, Bondarenko 2020, Bogomolets et al. 2023, a.o.). The problem with this kind of analysis is that it cannot capture robust cross-Algonquian generalizations about the Infl-C bleeding relationship discussed by Oxford (2015, 2017a, 2020a): when peripheral agreement and central agreement would both index the same argument, central agreement is Impoverished and realized as a 3SG elsewhere marker—and this causes *both prefix and central suffix to disappear*, in every single case. This is a complete accident under any analysis where these two affixes come from different sources. I discuss these patterns in much more detail later in the thesis in Section 9.3.2.

In SAP⟶SAP contexts, the prefix and central suffix can index features from two distinct arguments, something that Bondarenko (2020) takes as an argument against the unified analysis:

(26) a. **k-** nisukam -i -<u>pon</u>
2- dance.with$_{\text{TA}}$ -1OBJ -<u>1PL</u>
'**you/y'all** dance with <u>us</u>'

b. **k-** nisukam -ol -<u>pon</u>
2- dance.with$_{\text{TA}}$ -2OBJ -<u>1PL</u>
'<u>we</u> dance with **you/y'all**'

However, as Oxford (2019a: 86–87) notes, these patterns are naturally accounted for if we treat Infl as actually agreeing with *both* SAP arguments in SAP⟶SAP configurations (see also Grishin and Oxford 2023, who suggest that this is necessary due to a requirement that all SAP arguments be Agreed with). Then, it should be possible to Fission off features from one bundle to expone as a prefix, while exponing features of another bundle as a suffix. Of course, as Bondarenko notes, the details of this particular analysis need to be worked out (and these details depend on how exactly one formalizes the Fission operation, itself an independent question), but that in and of itself isn't an argument against the unified approach.

Where is central agreement located? Following Oxford (2017c, 2019b, 2019a) and Hammerly (2020, 2021), I place central agreement around T, in a head immediately below it which we can call Infl, following Oxford (see also Halle and Marantz 1993, Richards 2004, Bruening 2005, Coon and Bale 2014, Hamilton 2017, Bondarenko 2020, and Bogomolets et al. 2023, a.o., who propose that the central suffix expones Infl/T). The main reason for this is simply that central agreement appears closer to the root than (optional) tense/modal/evidential marking, which immediately follows the central suffix:

(27) **nt-** eksqi **-ponu** -hpon
1- sneeze$_{\text{AI}}$ **-1PL** -PRET
'we sneezed'

It could of course also be possible that central agreement and tense marking originate on the same head, with central agreement exponing the relevant probe and tense marking exponing the tense features. Whether Infl and T are the same head or different heads ultimately doesn't impact the conclusions of this thesis, and I will continue to split them here.

Central agreement is a core distinguishing property of the different clause types: the central agreement markers we get in different clause types are radically dissimilar. In the independent and subordinative, central agreement is realized as a discontinuous prefix plus suffix combination. In the conjunct, however, central agreement is only realized as a suffix, with a completely different set of exponents.

In Table 2.6 I provide the building blocks of independent and subordinative central agreement:

Prefix		Central suffix			
		Formative		Pluralizer	
n(t)-	1	*-(p)*	P	*-Ø*	SG
k(t)-	2	*-(ẅ)*	Ẅ	*-(o)n(n)(u)*	1PL
'(t)-	3	*-(w)*	W	*-a*	2PL, 3PL
		-(o)n(e)	N		

Table 2.6: Building blocks of independent and subordinative central agreement

As discussed, independent and subordinative central agreement is discontinuous, with a person prefix and central suffix. However, the central suffix is also (at least diachronically) decomposable into two parts, which we can call the FORMATIVE and the PLURALIZER, following Goddard (2007). The formative suffixes are historic relics of pre-Proto-Algonquian nominalizing suffixes, the diachronic source of the independent verbal paradigm (Goddard 1967, 1974, 2007, Frantz 1974, Weggelaar 1974, Proulx 1982, Pentland 1999). The pluralizing suffixes historically arose from possessor agreement suffixes on nouns, marking the plurality of the possessor. The P formative *-p* is null when word-final; the Ẅ formative *-ẅ* is generally only realized as umlaut on the stem-final vowel (*i*⟶*u*, *a*⟶*e*), hence the notation with an umlauted *w*; and the W formative *-w* is null except when followed by *-a* 'PL'. Throughout this thesis I will generally not segment out and gloss the formatives except for the Ẅ formative *-(ẅ)*, which I will gloss '3', and the N formative *-(o)n(e)*, though in the few cases where *-p* 'P' happens to be overt (SAP singular forms in the dubitative preterit) I will segment it out and gloss it 'PART' (for "participant").

There are two primary distinctions between the independent and subordinative central suffixes. The first is that the distribution of the formative suffixes differs. In the Passamaquoddy independent, we get the following distribution of formative suffixes (see Xu 2022 for cross-Algonquian discussion):

1. **P formative:** all (personful) arguments of the verb are SAPs
   (SAP AI, SAP/X⟶SAP)
2. **Ẅ formative:** the verb is intransitive with a third person subject
   (II and third person AI)
3. **W formative:** the verb is TA and there's a third person argument
   (TA SAP⟷3, 3⟶3)
4. **N formative:** everywhere else
   (AN⟷IN, AI+O and TA+O, AI unspecified subject)

In contrast, the subordinative lacks P and W formatives entirely. The Ẅ formative only appears with II verbs in the subordinative, and the N subordinative appears everywhere else. Thus, we can observe the following contrasts in the formative sot between independent and subordinative verbs, where P and W formatives get replaced by the N formative:

(28) a. n- pomoka **-p** -on IND
1- dance.along$_{\text{AI}}$ **-P** -1PL
'we dance (along)'

b. n- pomoka **-ne** -n SUB
1- dance.along$_{\text{AI}}$ **-N** -1PL
'we dance (along)'

(29) a. k- nomiy -a **-w** -a IND
2- see$_{\text{TA}}$ -3OBJ **-W** -PL
'y'all see him/her'

b. k- nomiy -a **-ni** -ya[14] SUB
2- see$_{\text{TA}}$ -3OBJ **-N** -PL
'y'all see him/her'

On the left we have independent verbs with P and W formatives, and on the right we see their corresponding subordinative counterpart both show the N formative.

The second difference between central agreement in the independent and subordinative is in third person AI forms. In the independent, the only central agreement we get in these forms is the umlauting Ẅ formative, with the features of the subject instead expressed on the peripheral agreement slot (to be discussed below). But in the subordinative, we *do* get central agreement with the third person intransitive subject, and we do not get peripheral agreement:

(30) a. akonutomi **-Ø**[16] -yik IND
tell.story$_{\text{AI}}$ **-Ẅ** -PROX.PL
'they are telling stories'

b. **'t-** akonutoma **-ni** **-ya** SUB
3- tell.story$_{\text{AI}}$ **-N** **-PL**
'they are telling stories'

On the left we find the 3PL AI independent verb with Ẅ and peripheral agreement, and on the right we see the corresponding subordinative form has full central agreement and lacks peripheral agreement. For more on this pattern, see Sections 4.1.3 and 9.3.2, as well as Oxford (2020a).

[14] We get *-niya* here from underlying *-(o)ne* + *-a* by regular phonology: the glide *y* is inserted to break up vowel hiatus, and *e* regularly raises to *i* before derived *y*.

[16] We see the effects of the Ẅ formative (here without a segmental realization) in changing the final vowel of underlying |akonutoma-| 'tell stories' to *e*, which then becomes *i* due to glide insertion as discussed in fn. 14.

Turning now to the conjunct, we find that central agreement is exponed purely by a suffix, which shows a full range of person, number, obviation, and animacy distinctions, and we can also see that there are a number of person portmanteaux in the conjunct central agreement paradigm. I list the simple conjunct central suffixes in Table 2.7 and the portmanteaux in Table 2.8. Note that the portmanteaux and simple suffixes do not co-occur: you essentially just insert whichever suffix is the most specified, given the arguments in the clause (again, an oversimplification; see Oxford 2021 for some discussion, and Sherwood 1986, Francis and Leavitt 2008, and Bondarenko 2020 for the full Passamaquoddy conjunct data and analysis).

	sg	pl
1	*-an*, *-(y)*	*-ek*, *-eq*
21		*-oq*
2	*-on*	*-eq*
3prox	*-t/k/q*	*-hti-t*
3obv	*-li-t*	
3in	*-k*	
X	*-mo-k*	

Table 2.7: Conjunct simple central suffixes

Fragile	*-uk*	1sg:3
	-ot	2sg:3
	-ukot	1pl:3
	-ut	X:3
Robust	*-nokot, -nomok*	3:1pl
	-inoq	3:21
	-inaq	3:2pl
	-iht	inv.3sg

Table 2.8: Conjunct portmanteau central suffixes

Here are a few notes on the central suffixes.

- The 1sg simple suffix has two forms, *-an* and *-(y)*. The suffix *-(y)* is found word-finally in perfectives, and *-an* is found elsewhere: word-finally in imperfectives, as well as followed by suffixes no matter the aspect (Sherwood 1986: 268, LeSourd 1993: 464-466, Francis and Leavitt 2008: 42).

- The alternation between animate third person *-t*, *-k*, and *-q* is synchronically conditioned by the identity of the preceding morpheme, though historically it arose from Proto-Algonquian phonologically-conditioned allomorphy: **-t* was used after vowels and **-k* after consonants (Proulx 1990: 114). In Passamaquoddy, we get *-q* after TI (and TI-O) finals that end in the TI "theme sign" *-u*, resulting in *-aq* (e.g. *olihtu-* 'make_{TI}' ⟶ *lihta-q* 'make_{TI}-3cj'), *-k* after TI (and TI-O) finals that end in the TI "theme sign" *-om*, with deletion of *m* (e.g. *punom-* 'put_{TI}' ⟶ *puno-k* 'put_{TI}-3cj'), also after the AI final *-(o)kil* 'be of X size' with schwa insertion (e.g. *apsokil-* '$\text{be.small}_{\text{AI}}$' ⟶ *apsokil-ok* '$\text{be.small}_{\text{AI}}$-3cj'), and after the second person theme sign, irrespective of adjacency (*-os-k* '2obj-3cj', *-ol-uh-k* '2obj-neg-3cj'), and finally *-t* appears elsewhere (e.g. *pokossin* 'fall_{AI}' ⟶ *pokossi-t* 'fall_{AI}-3cj').[17]

- The 1pl (exclusive) simple suffix is reported as *-ek* in all of the Passamaquoddy and Wolastoqey literature (e.g. Sherwood 1986, Francis and Leavitt 2008). However, for at least one

[17] A diachronic note: verbs like *pokossin* 'fall' (< Proto-Algonquian **pankihšin-*) are innovative, and reflect the reshaping of the distribution of Proto-Algonquian **-t/k* '3cj'. In Proto-Algonquian, **pankihšin-* would have a 3prox conjunct form **pankihšin-k*, straightforwardly reflected in Plains Cree *pahkisih-k* and Southwestern Ojibwe *bangishin-g*. However, the Passamaquoddy form *pokossit* reflects ***pankihšin-t*, with the innovative use of *-t* following a consonant-final stem. Thus, the Passamaquoddy *-t/k* alternation is no longer phonologically conditioned, but rather has to be analyzed as conditioned by specific preceding morphemes.

speaker (Edwina Mitchell, Wolastoqey), *-eq* is used as the 1PL conjunct suffix, resulting in a systematic ambiguity between 1PL and 2PL forms.[18]

- The portmanteaux divide up into two categories: *(i)* the FRAGILE portmanteaux, which never appear with (overt) theme signs and revert back to a simple suffix when negation intervenes between theme sign and central suffix; and *(ii)* the ROBUST portmanteaux, which can appear with overt theme signs (with the exception of *-iht*, which never appears with an (overt) theme sign) and remain even when negation intervenes between theme sign and central suffix (see Bondarenko 2020 and Grishin and Oxford 2022, 2023 for discussion). Thus, fragile *nomiy-**ukot*** 'see$_{\text{TA}}$-**1PL:3CJ**' has a negative *nomiy-a-w-**e**⟨h⟩**k*** 'see$_{\text{TA}}$-3OBJ-NEG-⟨NEG⟩**1PL**', whereas robust *nomiy-i-**nokot*** 'see$_{\text{TA}}$-1OBJ-**3:1PL:CJ**' has a negative *nomiy-i-**noko**⟨h⟩**q*** 'see$_{\text{TA}}$-1OBJ-⟨NEG⟩**3:1PL:CJ**'.

- I list two alternative 3⟶1PL portmanteaux: *-nokot* is used by our Passamquoddy consultants and *-nomok* is used by our Wolastoqey consultants (this is also the state of affairs reported by Sherwood 1986 for Wolastoqey and Francis and Leavitt 2008 for Passamaquoddy). Francis and Leavitt (2008) also report a third 3⟶1PL portmanteau *-nomot* for Passamaquoddy, but the speakers I've worked with do not use it.[19]

As is evident, the morphosyntax of central agreement is quite complex, and for that reason it has been the primary subject of research on Algonquian agreement systems (along with its relationship to the theme sign). For our purposes though, the core takeaways are the following: *(i)* central agreement occupies Infl and has a hierarchical agreement pattern; *(ii)* the independent and subordinative make use of the same set of prefixes and central suffixes, but with a few slight differences in distribution; and *(iii)* the conjunct makes use of a completely different set of suffixes, without any prefixes.

Peripheral agreement (C)

Finally, we turn to PERIPHERAL AGREEMENT, also called the PERIPHERAL SUFFIX—I use these terms interchangeably in this dissertation. Peripheral agreement is the linearly rightmost suffix in the verbal template, sitting outside of tense. I illustrate independent peripheral agreement in Table 2.9 and conjunct peripheral agreement in Table 2.10—the subordinative lacks peripheral agreement entirely (which I argue in Part I is due to subordinative clauses lacking CP).

---

[18]To illustrate:

(i) a. N-kisi= wonitahas-ulti-ne-n tama ehcuwi= l-apasi-**yeq**.
1-PFV= forget$_{\text{AI+O}}$-PL-N-1PL where IC.must= there-go.together$_{\text{AI}}$-**1PL.CJ**
'We forgot where we had to go.' (EM 2023.01.22)

b. Wen kis-ewestuwam-Ø-**eq**?
who IC.PFV-talk.to$_{\text{TA}}$-3OBJ-**2PL.CJ**
'Who did y'all talk to?' (EM 2023.04.11)

c. Wen skat kis-ewestuwam-a-w-**e**⟨h⟩**q**?
who NEG IC.PFV-talk.to$_{\text{TA}}$-3OBJ-NEG-⟨NEG⟩**2PL.CJ**
'Who didn't we talk to?' or 'Who didn't y'all talk to?' (EM 2023.04.11)

[19]Our Wolastoqey consultants recognize it but note that it sounds Passamaquoddy to them, and our Passamaquoddy consultants don't recognize it at all.

	IN	PROX	OBV
SG	*-Ø*	*-Ø*	*-(o)l*
PL	*-(o)l*	*-(o)k*	-`

Table 2.9: Independent peripheral agreement

	IN	PROX	OBV
SG	*-Ø*	*-Ø*	*-il*
PL	*-il*	*-ik*	*-ì, -ihi*

Table 2.10: Conjunct peripheral agreement

Note that the peripheral suffix only has exponents for third person (which I argue in Chapter 9 is because the peripheral agreement probe is relativized to third person). In the independent, the peripheral suffix is exactly the same as the nominal peripheral suffix marking the animacy, obviation, and number of the head noun—a synchronic state of affairs which straightforwardly betrays the independent's historic origins as nominalizations. In the conjunct, the peripheral suffix is similar, but the schwas are replaced with *i.* The grave accent marks a low pitch accent which is used to mark obviative plural (from historic final **-h*): in the independent this pitch accent associates with the underlying final vowel, bleeding final vowel syncope, and in the conjunct this pitch accent associates with the *-i* characteristic of the conjunct peripheral suffixes. Alternatively, there's a long *-ihi* form of the conjunct OBV.PL suffix—I'm not aware of what might be conditioning the difference between *-ì* and *-ihi*, or if they're simply in free variation.

The conjunct peripheral suffixes are optional. When they do appear, they cause preceding *-t* '3CJ' to palatalize to *-c*, the synchronic remnant of a historically productive palatalization process:

(31) a. elqahsi -li **-t**
IC.sleep$_{AI}$ -OBV **-3CJ**
's/he$_{OBV}$ sleeps'

b. elqahsi -li **-c** -il
IC.sleep$_{AI}$ -OBV **-3CJ** -OBV.SG
's/he$_{OBV}$ sleeps'

Additionally, plural conjunct peripheral suffixes, if they're indexing the same argument as the central suffix, will cause the plural supplement *-hti* to disappear:

(32) a. elqahsi **-hti** -t
IC.sleep$_{AI}$ **-PL** -3CJ
'they sleep'

b. elqahsi -c **-ik**
IC.sleep$_{AI}$ -3CJ **-PROX.PL**
'they sleep'

Note that this is not true for the obviative supplement, as evidenced by (31).

As we'll see in Chapter 10, in Passamaquoddy peripheral agreement in the independent always indexes the lowest third person in the clause: internal argument (IA) of direct monotransitive, external argument (EA) of inverse monotransitive, and theme of ditransitive.

(33) a. ikolisomanuwi -w **-ol** — Intransitive ⟶ index subject
be.white.person$_{AI}$ -3 **-OBV.SG**
'<u>she</u>$_{OBV}$ is a white person'

b. Ø- nomiy -a -wa **-l** — Direct monotransitive ⟶ index IA
3- see$_{TA}$ -3OBJ -PL **-OBV.SG**
'they$_{PROX}$ see <u>her</u>$_{OBV}$'

c. Ø- nomiy -uku -wa **-l** Inverse monotransitive ⟶ index EA
3- see$_{\text{TA}}$ -3OBJ -PL **-OBV.SG**
'they$_{\text{PROX}}$ were seen by her$_{\text{OBV}}$'

d. Ø- mil -a -ni -ya **-l** Ditransitive ⟶ index theme
3- give$_{\text{TA+O}}$ -3OBJ -N -PL **-OBV.SG**
'they$_{\text{PROX}}$ give them$_{\text{OBV}}$ it$_{\text{OBV}}$'

In other Algonquian languages, there are different patterns: I discuss this in detail in Part II; see also Xu (2022).

In the conjunct, peripheral agreement is optional. When it does appear, it can show a strikingly different pattern: in Ā extraction contexts, it will agree with whatever has been Ā extracted (Bruening 2001b: §4.3, Reintges et al. 2006: §7.4; see also Section 10.3.2 of this thesis).[20]

[20] In conjunct clauses without Ā extraction, speakers generally dislike peripheral agreement:

(i) a. *N-kocicihtu-n [eli yali= kotu-ks-ulti-c-**ik** apikciluwi-yik].
1-know$_{\text{TI}}$-N IC.C around= want-sleep$_{\text{AI}}$-PL-3CJ-**PROX.PL** skunk-PROX.PL
Intended: 'I know that the skunks are sleepy.' (EM 2023.01.20)

b. *Tanya palitahasu-Ø [olomuss etol-ahyekta-q-**il** skonis-ol].
Tanya be.happy$_{\text{AI}}$-3 dog IC.PROG-play.with$_{\text{TI}}$-3CJ-**IN.PL** bone-IN.PL
Intended: 'Tanya is happy that the dog is playing with the bones.' (GP, MA 2022.12.14)

Note that these sentences are perfectly fine if you remove peripheral agreement:

(ii) a. N-kocicihtu-n [eli yali= kotu-ks-ulti-hti-t apikciluwi-yik].
1-know$_{\text{TI}}$-N IC.C around= want-sleep$_{\text{AI}}$-PL-3PL-3CJ skunk-PROX.PL
'I know that the skunks are sleepy.' (EM 2023.01.20)

b. Tanya palitahasu-Ø [olomuss etol-ahyekta-q skonis-ol].
Tanya be.happy$_{\text{AI}}$-3 dog IC.PROG-play.with$_{\text{TI}}$-3CJ bone-IN.PL
'Tanya is happy that the dog is playing with the bones.' (GP, MA 2022.12.14)

However, occasionally, speakers do offer and accept conjunct peripheral agreement in non-Ā extraction contexts:

(iii) a. Ma n-pehki= kcicihtu-w-on [mace= mehtolihka-hti-c-**ik** pskihqimins-ok eli kisola-k].
NEG 1-clean= know$_{\text{TI}}$-NEG-N IC.start= rot$_{\text{AI}}$-PL-3CJ-**PROX.PL** strawberry-PROX.PL IC.C rain$_{\text{II}}$-CJ
'I'm not sure that the strawberries started rotting because it rained.' (GP, MA 2022.07.25)

b. Piyel Ø-nutuw-a-l [Tigaw-ol etol-ahyem-a-c-**ihi** wasis-\`].
Peter 3-hear$_{\text{TA}}$-3OBJ-OBV.SG Tiger-OBV.SG IC.PROG-play.with$_{\text{TA}}$-3OBJ-3CJ-**OBV.PL** child-OBV.PL
'Peter heard Tiger playing with the kids.' (GP 2023.01.30)

I've only gotten this consistently under perception verbs as in (34). Interestingly, in this case, it seems (at least provisionally, pending further investigation) like conjunct peripheral agreement shows the same "agree with lowest third person" pattern as the independent, as you cannot agree with the external argument *Tigawol* 'Tiger$_{\text{OBV}}$':

(iv) *Piyel Ø-nutuw-a-l [Tigaw-ol etol-ahyem-a-c-**il** wasis-\`].
Peter 3-hear$_{\text{TA}}$-3OBJ-OBV.SG Tiger-OBV.SG IC.PROG-play.with$_{\text{TA}}$-3OBJ-3CJ-**OBV.SG** child-OBV.PL
Intended: 'Peter heard Tiger playing with the kids.' (GP 2023.01.30)
GP: "That's one kid."

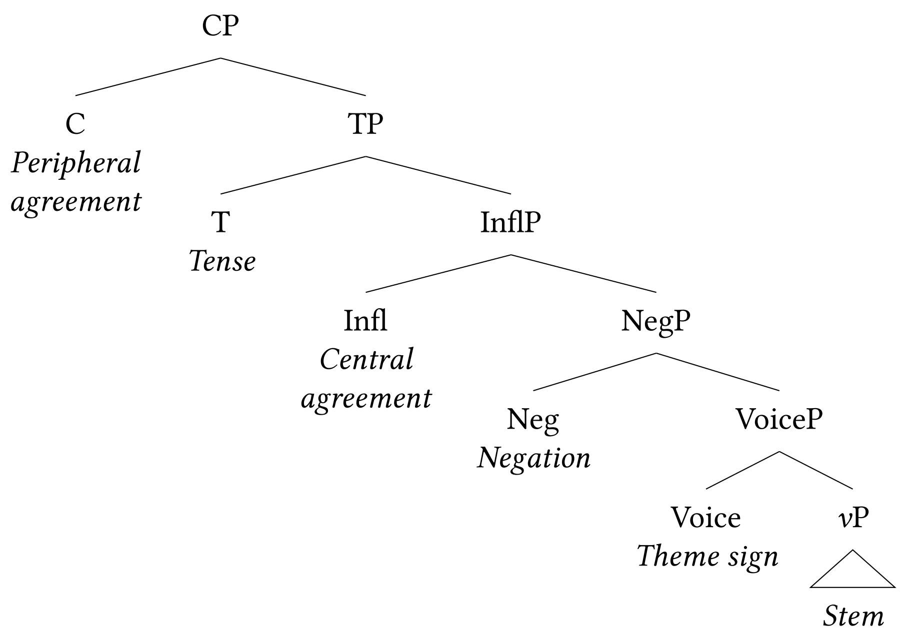
Interestingly, the speaker comment tells us that *-il* here really must be indexing the internal argument, as it's conveying that there should be only one kid, rather than plural *wasis* 'kids.OBV', and the ungrammaticality is arising due to that featural conflict. I will not discuss this data further in any detail in this thesis, as so far the correct empirical generalizations still remain elusive.

I follow Halle and Marantz (1993), Branigan and MacKenzie (1999), Bliss (2013), Oxford (2017a), Bondarenko (2020), Hammerly (2020, 2021), and Xu (2022), among others, in placing the peripheral suffix in C. Throughout this dissertation, I will offer a number of novel arguments for this conclusion: these are gathered together in Section 10.3.2. Part I of this thesis can also be read as an extensive argument for the peripheral suffix really being in C, due to (what I argue is) its systemic absence in CP-less clauses.

Summary

Ignoring the syntax of medials and initials/preverbs (which I have nothing concrete to say about, and which will not be a crucial part of this dissertation), we can summarize part of the preceding discussion in the following tree, which shows how the Algonquian verb is split up across the clause:

(34)



In this dissertation, I will not take a concrete stance on how the morphology originating on all these heads ends up on the verb, an issue of incredible complexity for which the literature has not yet come to a consensus (see Bruening 2019 and Branigan 2023 for some recent discussion and novel analyses).

The theme sign (Voice) is an object agreement marker, in certain contexts showing up as the inverse marker; central agreement (Infl) displays a hierarchical agreement pattern and shows a number of striking differences between independent, subordinative, and conjunct; and peripheral agreement (C) appears only in the independent and conjunct and prefers agreeing with the lowest third person (in Passamaquoddy). Section 4.1 discusses the morphology of different clause types in more detail.

2.3 Basic syntax and word order

In this section, I will provide a basic descriptive overview of clause structure and word order in Passamaquoddy, to help orient the reader around the examples to come. In particular, I want to focus on the linear order of various elements within a clause, building off of work by Bruening (2001b, 2007) and LeSourd (2004, 2006, 2014, 2019b)—I will not provide a formal analysis of word order here. I will discuss the basic word order properties of the clause and the DP here (on PPs in Passamquoddy, see LeSourd 2014). I also provide some discussion of discontinuous DPs, suggesting that they should receive a DISTRIBUTED DELETION analysis (Fanselow and Ćavar 2002, Pereltsvaig 2008, Bošković 2015, Wilson and Murphy 2022, Bondarenko and Davis 2023, a.o.).

2.3.1 Clausal syntax

Bruening (2001b: §1.4, Bruening 2007) carefully looks at word order and clause structure in Passamaquoddy, and develops the following descriptive template of the Passamaquoddy clause:[21]

(35) Topic [$_{\text{CP}}$ *wh* {...} NEG {...} V {...}]

In this template, there are four fixed points: an extra-clausal left-dislocated topic position (not subject to islands; Bruening 2001b: §3.5), a clause-initial position occupied by *wh* phrases, a preverbal position for negative markers (like *ma(-te)* 'NEG' found in independent clauses, *skat* 'NEG' found in conjunct clauses, and *mesq* 'not yet', among a few others), and the verbal complex. Within the clause, arguments and adjuncts can appear anywhere between *wh* and NEG, between NEG and the verb, or postverbally, with quite free word order.

We can see that *wh* phrases must precede the verb in the following examples—if they don't, they get an existential quantifier interpretation (they are QUEXISTENTIALS, to use Hengeveld et al.'s 2022 term):

(36) a. **Tama** 'ci-ye-Ø Piyel welaqik?
where from-go$_{\text{AI}}$-3 Peter last.night
'**Where** did Peter go last night?' (EM 2023.01.22)

b. Piyel 'ci-ye-Ø **tama** welaqik.
Peter from-go$_{\text{AI}}$-3 **where** last.night
'Peter went **somewhere** last night.' (EM 2023.01.22)

(37) a. **Tama** Sapet olomi-y-ya?
where Elizabeth away-go$_{\text{AI}}$-PROX.SG.ABSN
'**Where** did Elizabeth go?' (EM, RP 2022.05.09)

b. Sapet olomi-y-ya **tama**?
Elizabeth away-go$_{\text{AI}}$-PROX.SG.ABSN **where**
'Did Elizabeth go **somewhere**?' (EM 2023.05.09)
#'**Where** did Elizabeth go?'

[21] Bruening also recognizes a set of "initial particles", which appear around the same position as *wh* phrases„ but I leave them out of the discussion here for simplicity.

In (36), we see the basic contrast: sentence-initial *tama* 'where, somewhere' is most naturally interpreted as a *wh* question (36a), whereas non-sentence-initial *tama* 'where, somewhere' is interpreted as plain existential quantifier (here, in a declarative). In (37), we see that if we try to get a question interpretation for non-initial *tama* (37b), only a polar question is possible, not a *wh* question.

Additionally, we can straightforwardly show that negative particles must also be preverbal (note that negation in Passamaquoddy is bipartite: an independent negative particle must co-occur with negative inflection on the clausemate verb):

(38) a. **Ma(=te)** nt-iyw-a-w n-temis.
NEG(=EMPH) 1-have$_{\text{TA}}$-3OBJ-NEG 1-dog
'I don't have a dog.'[22] (EM 2022.12.21)

b. *Nt-iyw-a-w **ma(=te)** n-temis.
1-have$_{\text{TA}}$-3OBJ-NEG **NEG(=EMPH)** 1-dog
Intended: 'I don't have a dog.' (EM 2022.12.21)

As we can see, the only possibility is for negation to precede the verb—it's ungrammatical for it to follow.

While I don't have negative data about the order of *wh* phrases and negation, invariably we find that *wh* phrases precede negation:

(39) a. **Mehsi** =al **skat** =ona li-wihtasi-nuh-k apqasokihik-on kpasokihik-on?
IC.why =NDIR **NEG** =ADD thus-be.named$_{\text{II}}$-NEG-CJ unlock$_{\text{AI}}$-NMLZ lock$_{\text{AI}}$-NMLZ
'Why is a key called an opener and not a closer? (lit. 'And why is an opener not called a closer?') https://pmportal.org/dictionary/apqasokihikon

b. **Wen** **skat** kis-ewestuwam-a-w-e⟨h⟩q?
who **NEG** IC.PFV-talk.to$_{\text{TA}}$-3OBJ-NEG-⟨NEG⟩2PL.CJ
'Who didn't y'all talk to?' (EM 2023.04.11)

Thus, we have these fixed points in the clause: *wh* $\prec$ NEG $\prec$ V.

In between these positions, we can get various kinds of arguments and adjuncts: we can identify a pre-negation position, a post-negation position in between negation and the verb, and a postverbal position.

(40) Pre-negation position

a. **Norvin** ma=te '-kis-onuw-a-wi-yil molaqs-ol.
Norvin NEG=EMPH 3-PFV-buy$_{\text{TA}}$-3OBJ-NEG-OBV.SG milk-OBV.SG
'Norvin didn't buy milk.' (MA 2023.05.23)

b. **Tokec** **nit** ma=te Ø-nostom-uw-oni-ya.
now **that.IN.SG** NEG=EMPH 3-understand$_{\text{TI}}$-NEG-N-PL
'Now they don't comprehend that.' https://pmportal.org/dictionary/nostomon

[22] An interesting thing to note about this sentence, which I won't dwell on, is that it demonstrates that nominals possessed by definite/referential possessors in Passamaquoddy can be indefinite and nonreferential. I don't think any work has been done on definiteness and specificity in Passamaquoddy—this is an area ripe for future research.

c. **Wasis** kat=op k-piyem-hantuwi-kotuw-a-w.
Baby NEG=CF 2-more-devil-handle$_{\text{TA}}$-3OBJ-NEG
'Baby you will never conquer.' (Teeter and LeSourd 2007: 24)

(41) Post-negation position

a. Ma=te **nit** **athusossu-wok** Ø-wik-ahtom-uw-oni-ya!
NEGEMPH **that.IN.SG** **snake-PROX.PL** 3-like-eat$_{\text{TI}}$-NEG-N-PL
'Snakes don't like eating that!' (GP 2020.11.03)

b. Ma=te **Norvin** '-kis-onuw-a-wi-yil molaqs-ol.
NEG=EMPH **Norvin** 3-PFV-buy$_{\text{TA}}$-3OBJ-NEG-OBV.SG milk-OBV.SG
'Norvin didn't buy milk.' (MA 2023.05.23)

c. Ma **nil** **lam-ki-k** nt-oli-ya-w 'qotuhkayiw.
NEG **1SG** **under-earth-LOC** 1-there-go$_{\text{AI}}$-NEG alone
'I will not go down to hell alone.' (Newell and Leavitt 2020: 98)

(42) Postverbal position

a. Ma=te Ø-muhsaci-w-on-ol **psuwis** **Piyel-ol**.
NEG=EMPH 3-like$_{\text{AI+O}}$-NEG-N-OBV.SG **cat** **Peter-OBV.SG**
'The cat is not fond of Peter.' (EM 2023.04.11)

b. Ma=te poneqi-ye-w-Ø **oposonut**.
NEG=EMPH fall-go$_{\text{AI}}$-3 **basket**
'The basket didn't fall down.' (EM 2023.05.09)

c. Ma=te '-ciksotuw-a-wi-yol **Wasis**.
NEG=EMPH 3-listen.to$_{\text{TA}}$-3OBJ-NEG-OBV.SG **Baby**.
'Baby paid no attention to him.' (Teeter and LeSourd 2007: 24)

As we can see, subjects, objects, and various kinds of adjuncts can all occupy each of these positions. Moreover, we can have multiple constituents in each slot in the clausal template (though there are various kinds of gradient preferences—see Bruening 2001b: §1.4, 2007 for more details).

Bruening (2001b: §1.4) also notes that SVO (and OVS in the (third person) inverse) is the most common and default transitive word order, and that both SV and VS are common intransitive word orders (with SV being a bit more common that VS). However, word order is quite free, and any permutation of arguments is possible, with certain kinds of pragmatic and information structural effects in certain cases (though what those are exactly remains elusive and needs to be studied further).

Additionally, there are a number of second-position clitics, like *=olu* 'but, contrastive topic', *=yaq* 'reportative', *=oc, =(h)c* 'future', among several others. As LeSourd (2019b) demonstrates, these can either appear after the first (phonological) word of the clause (potentially appearing inside of a constituent), or after the first constituent/prosodic phrase:

(43) Second position clitics after first prosodic word, inside constituents

a.

[	Not	**=olu**	kotok	ehem	]	aps-awon-e-Ø.
	that.PROX.SG	=**CTOP**	other	hen		small-egg-have$_{\text{AI}}$-3

'That other hen lays small eggs.' https://pmportal.org/dictionary/apsawone

b.

[	Wot	**=yaq**	mahtoqehs	naka	coqols	]	tama=al	kcihku-k	etol-akonutoma-hti-t.
	this.PROX.SG	=**REP**	rabbit	and	frog		where=NDIR	forest-LOC	IC.PROG-tell.story$_{\text{AI}}$-3PL-3CJ

'This rabbit and a frog, they say, were telling stories somewhere in the woods.' (LeSourd 2019b: 112)

(44) Second position clitics after the first constituent/prosodic phrase

a.

[	Nil	kosona	Sapet	]	**=oc**	nt-ahsom-a-n	olomuss.
	1SG	or	Elizabeth		=**FUT**	1-feed$_{\text{TA}}$-3OBJ-1PL	dog

'Me or Elizabeth will feed the dog.' (EM 2023.03.28)

b.

[	Piht-ensk-osi-t	kehtaqs	]	**=yaq**	yali-	nomiy-a.
	IC.long-body-be$_{\text{AI}}$-3CJ	ghost		=**REP**	around-	see$_{\text{TA}}$-3OBJ

'A tall ghost has been seen around.' https://pmportal.org/dictionary/pihtenskosit

Additionally, if there are multiple second-position clitics, they can appear in both positions:

(45) a.

[	Yukt	**=olu**	wasis-ok	]	**=yaq**	'-totoli=	tokom-a-wa-l.
	this.PROX.PL	=**CTOP**	kid-PROX.PL		=**REP**	3-PROG=	hit$_{\text{TA}}$-3OBJ-PL-OBV.SG

'But the children, they say, were hitting him.' (LeSourd 2019b: 116)

b.

[	Wot	**=olu**	mihkomuwehs	]	**=yaq**	solahkiw	Ø-unakessi-n.
	this.PROX.SG	=**CTOP**	little.person		=**REP**	suddenly	3-stand.up$_{\text{AI}}$-N

'But the little person, they say, suddenly stood up.' (LeSourd 2019b: 116)

The fact that these can interrupt constituents and even appear inside coordinations (43b) suggests that their placement, as least some of the time, is determined phonologically.

2.3.2 DP syntax

Moving on to DP syntax, we can first immediately note that word order in the DP is much more restricted than clausal word order. As LeSourd (2004) lays out, the Passamaquoddy DP follows the following descriptive template (strikingly similar to that found in Ojibwe, Kathol and Rhodes 1999), to which I add an initial quantifier position hosting elements like *psi(-te)* 'all, every' and *pesq* 'some'[23]:

[23]Note that *pesq* is both a numeral 'one' and an existential quantifier. On the existential quantifier use (which can be pluralized) it appears before demonstratives, and on the numeral use it appears after demonstratives. Unfortunately, I don't have negative data to back this up—I leave that (as well as more research on DP syntax in general) to future work.

(46) quantifier ≺ demonstrative ≺ numeral ≺ modifier(s) ≺ nominal complex

I illustrate this template with the following examples:

(47) a. N-itap '-topeltom-on-ol [**nihtol** **nisonu-l** **pil-eya-l**
1-friend 3-own$_{TI}$-N-IN.PL **that.IN.PL** **two.IN-IN.PL** **new-ADJZ-IN.PL**
wikuwam-ol] Muselen-k.
house-IN.PL Eastport-LOC
'My friend owns [those two new houses] in Eastport.' (LeSourd 2004: 246)

b. [**Psi=te** **yukk** **skitapi-yik**] =ote =hp n-kisi=
all=EMPH **this.PROX.PL** **man-PROX.PL** =EMPH =CF 1-can=
li-wiy-a-nnu-k ame-winu-wok.
thus-call$_{TA}$-3OBJ-1PL-PROX.PL fish$_{AI}$-NMLZ-PROX.PL
'We could call [all these men] fishermen.' https://pmportal.org/dictionary/amewin

c. Aha, mec=ote nt-ihi-n-ol [**pesqonu-l** **nihtol** **kolusuwakoni=**
yes still=EMPH 1-have$_{TI}$-N-IN.PL **some.IN-IN.PL** **that-IN.PL** **word=**
wikhikon-ol].
book-IN.PL
'Yes, I still have [a few (some) of those dictionaries].'
https://pmportal.org/dictionary/pesqon

In (47a), we see an illustration of LeSourd's template, with the demonstrative *nihtol* 'that.IN.PL' preceding the numeral *nisonul* 'two.IN.PL', which then precedes the modifier *pileyal* 'new.IN.PL', and the finally the head noun *wikuwamol* 'houses'. In (47b), we can see that the quantifier *psi(-te)* precedes demonstratives, and (47c) demonstrates the same but with the quantifier *pesqonul* 'some.IN.PL'.

Note also that there is a process of nominal concord throughout the DP: all the dependents of the head noun must agree with it in number, animacy, and obviation. The exception to this are the quantifiers *psi-(te)* 'all, every' and the distributive quantifier *yat-te* 'each', as well as prenouns (the nominal counterpart of preverbs). We see the prenoun *kolusuwakoni* 'word' (derived from the noun *kolusuwakon* 'word' by suffixing *-i*) in (47c) modifying *wikhikon* 'book', and it doesn't concord with the head noun. Prenouns are like preverbs in forming part of the nominal complex, and possessor person prefixes appear before them:

(48) a. Ø-Moskuw-a-l '-**kihci=** sakoma-l.
3-find$_{TA}$-3OBJ-OBV.SG 3-**great=** chief-OBV.SG
'He found his great chief.' https://pmportal.org/dictionary/kci-kc-kt

b. N-kosi= iyw-a n-**pili=** n-itap.[25]
1-very= have$_{TA}$-3OBJ 1-**new=** 1-friend
'I am fond of my new friend.' https://pmportal.org/dictionary/kosi-iywal

[25]When the inalienably possessed noun *-itap* 'friend' takes a prenoun, the person prefix appears both on the

For this reason, I consider them as part of the complex noun stem even though word-level phonology (e.g. absence of hiatus resolution) occurs at prenoun boundaries. While preverbs can be separated from their corresponding verb stems by extra-verbal material, I am not aware if the same can happen with prenouns. In many cases, modifiers come in prenoun and independent pairs, like the prenoun *pili* ‘new’ (48b) and the independent modifier *piley* ‘new’ (47a), which is derived from *pil(i)-* with the adjectivalizing suffix *-(ew)ey*. Independent modifiers like this must undergo nominal concord, unlike prenouns.

It’s possible to show that alternative orders of constituents within the DP are impossible:

(49) N ≺ Dem impossible:

a.

Sepawonu	[	**not**	**skitap**	]	mace-he-Ø.
tomorrow		**that.PROX.SG**	**man**		away-go_{AI}-3

‘[**That man**] is leaving tomorrow.’

b.

*Sepawonu	[	**skitap**	**not**	]	mace-he-Ø.
tomorrow		**man**	**that.PROX.SG**		away-go_{AI}-3

*‘[**Man that**] is leaving tomorrow.’ (LeSourd 2004: 246)

(50) N ≺ Num impossible

a.

Roger	eyw-a-t	[	**nisu-`**	**‘-temis-`**	],	kat	kahk	new-wok.
Roger	IC.have_{TA}-3OBJ-3CJ		**two-OBV.PL**	**3-dog-OBV.PL**		NEG	CFOC	four-PROX.PL

‘Roger has [**two dogs**], not four.’ (EM 2022.12.21)

b.

*Roger	eyw-a-t	[	**‘-temis-`**	**nisu-`**	],	kat	kahk	new-wok.
Roger	IC.have_{TA}-3OBJ-3CJ		**3-dog-OBV.PL**	**two-OBV.PL**		NEG	CFOC	four-PROX.PL

*‘Roger has [dogs two], not four.’ (EM 2022.12.21)

(51) Num ≺ Dem impossible

a.

Ø-Nomiy-a-k	[	**yuktok**	**nuhu-wok**	psuwis-ok	]	wolaku.
1-see_{TA}-3OBJ-PROX.PL		**this.PROX.PL**	**three-PROX.PL**	cat-PROX.PL		yesterday

‘I saw [**these three** cats] yesterday.’ (RP 2020.06.10;CD)

b.

*Ø-Nomiy-a-k	[	**nuhu-wok**	**yuktok**	psuwis-ok	]	wolaku.
1-see_{TA}-3OBJ-PROX.PL		**three-PROX.PL**	**this.PROX.PL**	cat-PROX.PL		yesterday

*‘I saw [**three these** cats] yesterday.’ (RP 2020.06.10;CD)

From this data, we can see that demonstratives and numerals must precede the noun, and that demonstratives must precede numerals.

Possessors can either precede or follow the head noun, as noted by LeSourd (2004):

---

prenoun as well as on the noun root, as in this particular example. We also see this in *nuli-nitap* ‘my best friend’, *kuli-kitap* ‘your best friend (from *n/k-* ‘1/2’ + *woli* ‘good’ + *-itap* ‘friend’. This fact about prefix repetition may be true more generally for all inalienable/relational nouns (which in Algonquian parlance are called “dependent nouns”), but I have not tested this.

(52) a. El-kil-uli-t [**Laca** **’-posu-m-ol**].
IC.thus-be.size$_{\text{AI}}$-OBV-3CJ **Roger** **3-cat-POSS-OBV.SG**

b. El-kil-uli-t [**’-posu-m-ol** **Laca**].
IC.thus-be.size$_{\text{AI}}$-OBV-3CJ **3-cat-POSS-OBV.SG** **Roger**
Both: ‘[**Roger’s cat**] is so big.’ (GP 2020.07.29;CD)

However, the possessor-noun order is by far the most common. I do not know how possessors can be ordered with respect to the other constituents in the DP.

Passamaquoddy has both externally-headed as well as internally-headed relative clauses. As LeSourd (2004) and Reintges et al. (2006) argue, externally-headed relative clauses generally follow the relative head, and when a relative clause linearly precedes the relative head, we actually have an internally-headed relative clause, as illustrated below:[26]

(53) a. *Post-nominal relative clause ⟶ head-external*
Komac kin-kil-Ø [not **otuhk** [n-tatat nehpah-a-c-il]].
very big-be.size$_{\text{AI}}$-3 that.PROX.SG **deer** 1-dad IC.kill$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
‘[The **deer** [that my dad killed]] is very big.’ (Reintges et al. 2006: 174)

b. *Pre-nominal relative clause ⟶ head-internal*
Komac kin-kil-Ø [not [n-tatat nehpah-a-c-il
very big-be.size$_{\text{AI}}$-3 that.PROX.SG 1-dad IC.kill$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
otuhk-ol]].
deer-OBV.SG
‘[The **deer** [that my dad killed]] is very big.’ (LeSourd 2004: 251)

As LeSourd (2004: 249, fn. 7), one likely exception to this generalization is that short relative clauses—those consisting only of one word—precede the head relatively often (similar facts are noted for Ojibwe by Kathol and Rhodes 1999: 85, fn. 5):

(54) a. Kamotu wot sakhi-tokkuwi-t, iya, [**cessi-naqsi-t** psuwis].
suddenly this.PROX.SG IC.out-jump$_{\text{AI}}$-3CJ yeah **IC.annoying-seem$_{\text{AI}}$-3CJ** cat
‘Suddenly out jumps [this **annoying** cat].’ (GP 2022.11.02)

b. N-wik-ahp-a [**kisiy-uk** sukolopan].
1-like-eat$_{\text{TA}}$-3OBJ **IC.make$_{\text{TA}}$-1SG:3CJ** cake
‘I like [the cake **I made**].’ (EM 2023.03.28)

c. [Nihiw-ok **meci-k-ulti-hti-t** olomuss-ok] n-kisi= pokehl-oku-nnu-k.
three-PROX.PL **IC.bad-be.$_{\text{AI}}$-PL-3PL-3CJ** dog-PROX.PL 1-PFV= bite$_{\text{TA}}$-INV-1PL-PROX.PL
‘[Three **bad** dogs] bit us.’ (EM 2023.03.28)

[26]The core argument for this conclusion comes from the behavior of obviation in these two structures. External heads take their obviation status from the matrix clause, whereas internal heads take their obviation status from inside the relative clause, and when we have a rightward head as in (53b) the obviation status of the relative head *must* be assigned within the relative clause. See LeSourd (2004) and Reintges et al. (2006) for more details, and also see Section 2.5 for more detail on obviation in Passamaquoddy.

It's unclear to me whether these are head-internal relative clauses or whether they can also be head-external—more work needs to be done. I also do not know for sure how relative clauses can be ordered with respect to the other constituents in the DP, though it seems at least provisionally that they occupy the modifier slot between numerals and the noun (see 54c).

An excursion on discontinuous DPs

One last observation about DPs in Passamaquoddy is that they are very often *discontinuous*, with one part of a DP preceding the verb and the rest following, as in the following examples:

(55) a. [**Psi=te**] n-sikte-hpawol-uku-ne-nnu-l [**nilun**] nahanu-l[28] wikhikon-ol.
all=EMPH 1-very-scare$_{\text{TA}}$-INV-N-1PL-IN.PL **1PL** three.IN-IN.PL
'[**All of us**] were scared by three books.' (EM 2023.05.30)

b. Kamotu [**wot**] sakhi-tokkuwi-t, iya, [**cessi-naqsi-t**
suddenly **this.PROX.SG** IC.out-jump$_{\text{AI}}$-3CJ yeah **IC.mosquito-seem$_{\text{AI}}$-3CJ**
psuwis].
cat
'Suddenly out jumps [**this annoying cat**].' (GP 2022.11.02)

c. Koles [**pesku-wol**] eyw-a-c-il [**psuwis-ol**], ma kahk
Grace **one-OBV.SG** IC.have$_{\text{TA}}$-3OBJ-3CJ-OBV.SG **cat-OBV.SG** NEG CFOC
nisu-wok.
two-PROX.PL
'Grace has [**one cat**], not two.' (GP, MA 2022.12.14)

d. [**Koles**] nemiy-uk-il [**'-posu-m-ol**], ma kahk
Grace IC.see$_{\text{TA}}$-1SG:3CJ-OBV.SG **3-cat-POSS-OBV.SG** NEG CFOC
Ø-mossis-om-ol.
3-older.sister-POSS-OBV.SG
'I saw [**Grace's cat**], not her older sister's.' (GP 2022.12.14)

In (55a), we learn that the quantifier *psi-te* 'all, every' can split from the rest of the DP. In (55b), we see that demonstratives can split as well, as can numerals (55c) and possessors (55d). It's very easy to elicit this when contrastively focusing one part of a DP, as in the last two examples, but that's not necessary for a discontinuous DP, and quite often speakers will offer them out of the blue. These kinds of discontinuous DPs are quite common across Algonquian languages, found also in Algonquin (Junker 1994), Menominee (Johnson and Rosen 2015), Meskwaki (Dahlstrom 1987), Swampy Cree (Reinholtz 1995, 1999, Reinholtz and Russell 1995, Russell and Reinholtz 1996), Odawa (Kathol and Rhodes 1999), and most likely several others.

One important constraint on discontinuous DPs in Passamaquoddy (as well as in the rest of Algonquian, as far as I am aware), as noted by LeSourd (2004), is that they must preserve the word order restrictions in (46): Quant $\prec$ Dem $\prec$ Num $\prec$ Adj $\prec$ N. This is likely a Cyclic Linearization effect (Fox and Pesetsky 2005).

[28] Note that Francis and Leavitt (2008) provide the inanimate plural form of 'three' as *nohonul*, with two schwas, but this speaker pronounced it as *nahanul*, with /a/.

(56) Dem ≺ N preserved:

a. Nt-oli= [**niktok**] nomiy-a-k [**skitapi-hik**] Kelis-k.[30]
1-there= **that.PROX.PL** see$_{TA}$-3OBJ-PROX.PL **man-PROX.PL** Calais-LOC
'I saw [**those men**] in Calais.' (LeSourd 2004: 246)

b. *Nt-oli= [**skitapi-hik**] nomiy-a-k [**niktok**] Kelis-k.
1-there= **man-PROX.PL** see$_{TA}$-3OBJ-PROX.PL **that.PROX.PL** Calais-LOC
*'I saw [**men those**] in Calais.' (LeSourd 2004: 246)

(57) Num ≺ N preserved:

a. Roger [**nisu-`** ] eyw-a-t [ **'-temis-`**], kat kahk new-wok.
Roger **two-OBV.PL** IC.have$_{TA}$-3OBJ-3CJ **3-dog-OBV.PL** NEG CFOC four-PROX.PL
'Roger has [**two dogs**], not four.' (EM 2022.12.21)

b. *Roger [**'-temis-`** ] eyw-a-t [ **nisu-`**], kat kahk new-wok.
Roger **3-dog-OBV.PL** IC.have$_{TA}$-3OBJ-3CJ **two-OBV.PL** NEG CFOC four-PROX.PL
*'Roger has [**dogs two**], not four.' (EM 2022.12.21)

As we can see, Dem ≺ N and Num ≺ N order must be preserved in discontinuous DPs.[31] Unfortunately, I do not have the relevant data to show that the Quant ≺ N order must be preserved as well, though in every example I'm aware of discontinuous quantifiers still precede the head noun. Similarly, I don't have relevant data for modifiers, though again, I've only ever seen them preserve linear order.

[30]Note that this example teaches us that we can interleave a discontinuous DP with a discontinuous verbal complex, in a kind of chiastic configuraton: *niktok* 'those' is sandwiched between the preverb (along with the person preverb) and the verb stem, whereas *skitapihik* appears postverbal. This isn't a confound—we get the same results in simpler examples:

(i) a. [**Yukk**] n-kisiy-a-k [**sukolopanis-ok**].
this.PROX.PL 1-make$_{TA}$-3OBJ-PROX.PL **cake-PROX.PL**
'I made [**these cakes**].' (EM 2022.12.21)

b. *[**Sukolopanis-ok**] n-kisiy-a-k [**yukk**].
cake-PROX.PL 1-make$_{TA}$-3OBJ-PROX.PL **this.PROX.PL**
*'I made [**cakes these**].' (EM 2022.12.21)

[31]Note also that the preverbal part doesn't have to be adjacent to the verb, nor does the postverbal part:

(i) a. [**Psi=te**] nil Ø-nokka-hl-a-k [**cikoni-hik**].
all=EMPH 1SG 1-completely-eat$_{TA}$-3OBJ-PROX.PL **apple-PROX.PL**
'I ate [**all the apples**].' (GP, RP 2021.05.17;CD)

b. N-kisi= [**nohonu-l**] mil-a-n-ol n-qoss [**atomupil-ol**].
1-PFV= **three.IN-IN.PL** give$_{TA+O}$-3OBJ-N-IN.PL 1-son **car-IN.PL**
'I gave my son [**three cars**].' (Bruening and Lin 2001: 23)

Strikingly, if there are more than two nominal constituents, we can split the DP at any point, as long as linear order is preserved:

(58) a. [**Yuktok**] nemiy-uk [**nuhu-wok** **psuwis-ok**] wolaku.
this.PROX.PL IC.see$_{\text{TA}}$-1SG:3CJ **three-PROX.PL** **cat-PROX.PL** yesterday

b. [**Yuktok** **nuhu-wok**] nemiy-uk [**psuwis-ok**] wolaku.
this.PROX.PL **three-PROX.PL** IC.see$_{\text{TA}}$-1SG:3CJ **cat-PROX.PL** yesterday

Both: 'I saw [**these three cats**] yesterday.' (RP 2020.06.10;CD)

(59) a. Nopal [**yut**] mil-ki-yan [**pil-ey** **l-ayyekt-akon**].
if.only **this.IN.SG** give$_{\text{TA+O}}$-INV.X-1SG.CJ **new-ADJZ** **thus-play$_{\text{TI}}$-NMLZ**

b. Nopal [**yut** **pil-ey**] mil-ki-yan [**l-ayyekt-akon**].
if.only **this.IN.SG** **new-ADJZ** give$_{\text{TA+O}}$-INV.X-1SG.CJ **thus-play$_{\text{TI}}$-NMLZ**

c. Nopal [**yut** **pil-ey** **l-ayyekt-akon**] mil-ki-yan.
if.only **this.IN.SG** **new-ADJZ** **thus-play$_{\text{TI}}$-NMLZ** give$_{\text{TA+O}}$-INV.X-1SG.CJ

All: 'I wish I would be given [**this new toy**].' (LeSourd 2004: 261)

In these examples with three-member DPs, we can split the DP either after the first constituent or after the second (or, in (59c), we can move the whole DP to a preverbal position). In each case the ordering Quant ≺ Dem ≺ Num ≺ Adj ≺ N is preserved.

Note also that in the 2–1 split, the preverbal component of the DP is not a constituent (at least under standard assumptions about DP structure).[32] The same kinds of patterns in various Slavic languages, in particular Russian, have motivated an analysis under which discontinuous constituents in Slavic are derived via DISTRIBUTED DELETION—that is, the *whole* phrase is moved, and part of it is pronounced in its higher position and the rest is pronounced in its lower position (e.g. Fanselow and Ćavar 2002, Pereltsvaig 2008, Bošković 2015, Bondarenko and Davis 2023, a.o.). And if distributed deletion is regulated by an order-preservation principle like Cyclic Linearization (Fox and Pesetsky 2005), as Davis (2020, Ch. 4, §5) and Privoznov (2021: 146) suggest, then we naturally capture the order preservation effects in Passamaquoddy (and Algonquian in general) discontinuous DPs.

I'd like to offer one additional argument in favor of the distributed deletion view, which builds on an observation I'll also be discussing later in Section 10.3.2. This argument has to do with possessor extraction under focus. First, when an argument is focused, we can (optionally) get conjunct verb forms (Section 4.2.2)—and, as we've seen in (55c–d), this allows for discontinuous DPs. Second, peripheral agreement (C) in the conjunct agrees with whatever's been Ā extracted, an Ā agreement pattern—this includes foci (Sections 2.2.2, 10.3.2, and also Bruening 2001b: §4.3, Reintges et al. 2006: §7.4). With this background in mind, consider possessor extraction under

[32] We get similar facts with discontinuous PPs/locative adjuncts, as LeSourd (2014) notes:

(i) Piyel [**nit** **waht** **oloqi**] wiku-Ø [**Utoqehki-k**].
Peter **there** **far** **near** live$_{\text{AI}}$-3 **Grand.Lake.Stream-LOC**

'Peter lives [**out there near Grand Lake Stream**].' (LeSourd 2014: 235)

For more information on Passamaquoddy PPs, see LeSourd (2014). Note also that this, again, parallels similar behavior with Russian PPs (Pereltsvaig 2008, Bondarenko and Davis 2023, a.o.).

two potential analysis of discontinuous DPs, which we can call the DIRECT EXTRACTION analysis (60a) and the DISTRIBUTED DELETION analysis (60b), with C driving the movement:

(60) a. **Grace's** C I saw [⟨Grace's⟩ **cat**]. Direct extraction

b. [**Grace's** ⟨cat⟩] C I saw [⟨Grace's⟩ **cat**]. Distributed deletion

Under direct extraction (60a), C directly Agrees with the possessor and then moves it. Under distributed deletion (60b), C Agrees with the whole DP headed by the possessum and then moves that. If the possessor and possessum differ in their features, this will make different predictions with regards to Ā agreement: under direct extraction, we should find Ā agreement with the possessor (*Grace* above), whereas under distributed deletion we should find Ā agreement with the possessum (*cat* above).

When we apply this diagnostic to Passamaquoddy, we find that peripheral agreement actually indexes the postverbal possessum rather than the preverbal possessor:

(61) a. [Koles] nemiy-uk-**il** [<u>'-posu-m-ol</u>], ma kahk
Grace IC.see$_{\text{TA}}$-1SG:3CJ-**OBV.SG** <u>3-cat-POSS-OBV.SG</u> NEG CFOC
Ø-mossis-om-ol.
3-older.sister-POSS-OBV.SG
'I saw [GRACE's <u>cat</u>], not HER OLDER SISTER's.' (GP 2022.12.14)

b. [Roger] nemiy-uk-**il** [<u>'-temis-ol</u>], ma=te kenu Taniya
Roger IC.see$_{\text{TA}}$-1SG:3CJ-**OBV.SG** <u>3-dog-OBV.SG</u> NEG=EMPH but Tanya
Ø-nomihtu-w-a-w-on-ol '-temis-ol.
1-see$_{\text{TI}}$-APPL-3OBJ-NEG-N-OBV.SG 3-dog-OBV.SG
'I saw [ROGER's <u>dog</u>], but I didn't see TANYA's dog.' (EM 2022.12.21)

In these examples, we get obviative singular agreement with the possessum. Strikingly, this occurs despite the focus being on the possessor (in small caps), as indicated by the follow-ups. This is exactly the pattern predicted by the distributed deletion account.

Thus, distributed deletion seems like a promising path forward for analyzing Passamaquoddy discontinuous DPs (as well as potentially across Algonquian as well). If this is the right analysis, all these instances of what looks like left-branch extraction of would actually involve (covert) pied-piping, and it wouldn't actually be possible to extract possessors (among other left branches) in Passamaquoddy—a conclusion that can help us explain certain independent facts we'll encounter later, like the impossibility of long-distance agreement with possessors (Section 5.2.1, ex. 264). However, more work on this needs to be done. For instance, we need negative data for (61) to show that agreement with the possessor is impossible (here we can't tell because the possessor is proximate singular and proximate singular peripheral agreement is null—so we can't distinguish between proximate singular agreement versus an absence of agreement, which is independently possible since peripheral agreement in the conjunct is optional). Additionally, we'd also need data distinguishing between a distributed deletion analysis and a remnant movement analysis, as all the data presented so far is compatible with both kinds of derivations (for discussion on distinguishing these two analyses, see Bondarenko and Davis 2023). I leave investigation of these and other issues for future research.

In sum, we've seen that the following template captures the linear ordering of Passamaquoddy DPs, both in contiguous DPs and discontinuous DPs:

(62) quantifier $\prec$ demonstrative $\prec$ numeral $\prec$ modifier(s) $\prec$ nominal complex

The position of possessors is freer, being able to both precede and follow the head noun (though preceding is much more common), and head-external relative clauses usually follow the head noun, though short ones can perhaps precede it, appearing in the modifier position.

2.4 The inverse

Algonquian languages are well-known for their system of direct-inverse marking. This has attracted an enormous amount of study, both formal-theoretical and descriptive-functional, and both language-specific as well as typological. I cannot and will not do justice to this literature, but instead refer the interested reader to the following (non-exhaustive) list of citations:

- *Descriptive-functional work dealing with the Algonquian inverse:*
  Hockett (1966), Klaiman (1991, 1992), Thompson (1994), Gildea (1994, 2012), Givón (1994), Wunderlich (2005), Zúñiga (2006, 2014), Goddard (2007), Wolvengrey (2011), Jacques and Antonov (2014, 2018), Haude and Zúñiga (2016), Witzlack-Makarevich et al. (2016), Oxford (2017b, 2020b, 2023c).

- *Formal-theoretical work dealing with the Algonquian inverse:*
  Rhodes (1976, 1994, 2017), Dahlstrom (1991, 2015), Halle and Marantz (1993), McGinnis (1995, 1999), Aissen (1997), Brittain (1999), Bruening (2001b, 2005, 2009), Bliss (2005, 2013), Quinn (2006), Trommer (2006), Béjar and Rezac (2009), Lochbihler (2012), Bliss et al. (2014), Oxford (2014, 2017c, 2019b, 2022, 2023d), Hamilton (2015b, 2018), Thivierge (2016, 2017), Alsina and Vigo (2017), Despić and Hamilton (2018), Bondarenko (2020), Hammerly (2020), Grishin (2022).

Instead, I'll just present my preferred analysis of inverse marking across Algonquian, which I'll be assuming throughout the rest of this dissertation. This view is represented in the literature by Grishin (2022) and Oxford (2023d), though many of the core insights of the analysis build on earlier work. Morphologically, the inverse marker is just the elsewhere exponent of Voice, which appears when φ features on Voice have been Impoverished due to a dissimilatory Impoverishment rule when they are duplicated on Infl. Syntactically, the inverse in 3⟶SAP scenarios is purely morphological, whereas the inverse in 3⟶3 scenarios involves the internal argument A-moving over the external argument.

2.4.1 The inverse, descriptively

But before we get ahead of ourselves, let's first go through the standard introduction to inverse marking (e.g. following Hockett 1966). The core intuition behind the standard description of direct/inverse marking is the idea of "direction" on the following hierarchy:

(63) SAP > 3AN.PROX > 3AN.OBV > IN

You have a direct scenario if the agent outranks the patient on this hierarchy, and you have an inverse scenario if the reverse holds. Direct/inverse marking thus conveys the "direction of the action" along the hierarchy.

Under the standard description, we can analyze the following Passamaquoddy forms like so:

(64) SAP↔3

a. n-qotahpol-**a**-nnu-k
1-scold$_{\text{TA}}$-**DIR**-1PL-PROX.PL
'we$_{\text{EXC}}$ scold them' (DIR)

b. n-qotahpol-**ku**-nnu-k
1-scold$_{\text{TA}}$-**INV**-1PL-PROX.PL
'they scold us$_{\text{EXC}}$' (INV)

(65) PROX↔OBV

a. '-qotahpol-**a**-wa-l
3-scold$_{\text{TA}}$-**DIR**-PL-OBV.SG
'they$_{\text{PROX}}$ scold her$_{\text{OBV}}$' (DIR)

b. '-qotahpol-**ku**-wa-l
3-scold$_{\text{TA}}$-**INV**-PL-OBV.SG
'she$_{\text{OBV}}$ scold them$_{\text{PROX}}$' (INV)

In the (a) examples, the agent outranks the patient, and we get the "direct" marker *-a*. In the (b) examples, the patient outranks the agent, and we get the "inverse" marker *-(o)ku*. Note that all the other agreement markers do not change between the (a) and (b) examples: the only indication we get of who is acting on who comes from direct/inverse marking.

2.4.2 Inverse *-oku* as default

If we want to formalize this standard description, it seems like we'd need our theory to admit some notion of "hierarchy" as a primitive, in order to allow markers like *-a* 'DIR' and *-oku* 'INV' to be able to compare agent and patient on this hierarchy. It's unclear whether this is a desirable result, and an important question arises as to what extent we can reduce the Algonquian inverse to other, more basic formal building blocks familiar to us from other languages.

An important idea that breaks down this classic description is the idea that, in the general case, the theme sign (the slot in the verb that hosts the direct/inverse alternation) is just an object agreement marker, as described in Section 2.2 (Rhodes 1976, Brittain 1999, McGinnis 1999, Goddard 2007, Oxford 2014, Thivierge 2016, Despić and Hamilton 2018, a.o.). We can see this below, illustrating the analysis of *-i* as a first person object marker, *-ol* as a second person object marker, and *-a* (the "direct" theme sign) as a third person object marker:

(66) *-i* as 1OBJ

a. k-ulluw-**i**
2-praise$_{\text{TA}}$-**1OBJ**
'you praise me'

b. welluw-**i**-t
IC.praise$_{\text{TA}}$-**1OBJ**-3CJ
'(that) she praises me'

(67) *-ol* as 2OBJ

a. k-ulluw-**ol**
2-praise$_{\text{TA}}$-**2OBJ**
'I praise you'

b. welluw-**os**-k[34]
IC.praise$_{\text{TA}}$-**2OBJ**-3CJ
'(that) she praises you'

(68) *-a* as 3OBJ

a. n-ulluw-**a**
1-praise$_{TA}$-**3OBJ**
'I praise her'

b. k-ulluw-**a**
2-praise$_{TA}$-**3OBJ**
'you praise her'

c. Ø-ulluw-**a**-l
3-praise$_{TA}$-**3OBJ**-OBV.SG
'she$_{PROX}$ praises her$_{OBV}$'

When we zoom out to look at the full range of scenarios in both the independent (and subordinative) and the conjunct (Tables 2.11 and 2.12), the picture becomes even clearer: *-i* only appears with first person objects, *-ol* only appears with second person objects, and *-a* only appears with third person objects.

A↓ O→	1	2	3PROX	3OBV
1	—	-ol	-a	-a
2	-i	—	-a	-a
3PROX	-oku	-oku	—	-a
3OBV	-oku	-oku	-oku	-a/-oku

Table 2.11: Independent theme sign

A↓ O→	1	2	3PROX	3OBV
1	—	-ol	-a	-a
2	-i	—	-a	-a
3PROX	-i	-ol	—	-a
3OBV	-i	-ol	-oku	-a/-oku

Table 2.12: Conjunct theme sign

The inverse marker *-oku* is the only theme sign that doesn't seem to have an obvious generalization about its distribution in the independent and conjunct—in other words, it looks like it has the distribution of an elsewhere, default form.

This insight—the theme sign is just object agreement, with the inverse marker being an elsewhere—is productively employed by Oxford (2017c, 2019b, 2022) in his analysis of the distribution of inverse marking in Algonquian. The crucial observation that Oxford takes advantage of is the generalization that you get inverse marking if and only if Infl (central agreement) has agreed with (only) the object. We can demonstrate this on a small scale by comparing independent 3→SAP forms to conjunct 3→SAP forms:

(69) Independent 3PL→1

a. $\boxed{\text{n}}$-sekpawol-**oku**-k
$\boxed{\text{1}}$-scare$_{TA}$-**INV**-PROX.PL
'they scare me'

b. $\boxed{\text{n}}$-sekpawol-**oku**-$\boxed{\text{nnu}}$-k
$\boxed{\text{1}}$-scare$_{TA}$-**INV**-$\boxed{\text{1PL}}$-PROX.PL
'they scare us'

(70) Conjunct 3PL→1

a. sekpawol-**i**-$\boxed{\text{hti-t}}$
scare$_{TA}$-**1OBJ**-$\boxed{\text{3PL-3CJ}}$
'if they scare me'

b. sekpawol-**i**-$\boxed{\text{nokot}}$
scare$_{TA}$-**1OBJ**-$\boxed{\text{3:1PL.CJ}}$
'if they scare us'

Central agreement (boxed) differs quite radically in the independent and the conjunct. Notably, in the independent, central agreement indexes only the object in 3→SAP scenarios, whereas in the conjunct, it has access to features from both arguments—in the 3→1SG case, central agreement only (overtly) indexes the third person external argument, whereas in the 3→1PL case, central

[34]Note that *-os* is an allomorph of *-ol* when it precedes the conjunct third person central suffix *-t/k*.

agreement indexes both external and internal argument with a portmanteau. Following Grishin and Oxford (2023), I assume that in the Passamaquoddy conjunct, Infl systematically agrees with both arguments in 3⟶SAP scenarios (but not in SAP⟶3). In contrast, in the independent, Infl agrees with only the internal argument in 3⟶SAP scenarios (Oxford 2017c, 2019b).

Thus, we have a contrast in the behavior of Infl between independent and conjunct—which, crucially, needs to be stated and accounted for independently of the question of inverse marking. If we then turn our attention to the behavior of the theme sign, we notice that in 3⟶SAP scenarios we get the inverse marker in the independent, but normal object agreement in the conjunct. This lines up with the behavior of Infl: if Infl has agreed with only the object, then we get inverse marking; if Infl hasn't agreed only with the object, then we don't get inverse marking. In other words, the inverse theme sign appears whenever Voice and Infl have agreed with the same goal: the object, and only the object. This generalization is strikingly robust, and essentially exceptionless across Algonquian (Oxford 2017c, 2019b, 2022).

This generalization allows for a natural account of inverse marking as involving a kind of dissimilatory Impoverishment operation, as Oxford notes (*à la* Kinyalolo's Constraint familiar from Bantu; Kinyalolo 1991, Carstens 2003, 2005). The idea goes as follows: whenever Voice and Infl have agreed with the same goal (and only that goal), the φ features on Voice are Impoverished. Then, we only need to say that the inverse theme sign is the default, elsewhere exponent for Voice. This is Oxford's analysis of inverse marking, in a nutshell, and is what I will be assuming for the rest of this dissertation:

(71) a. Dissimilatory Impoverishment (Kinyalolo's Constraint):
If Voice and Infl are featurally identical due to having agreed with the same goal, delete the φ features on Voice.

b. Vocabulary items (based on Oxford 2019b: 980):

(i)	*-i*	'1OBJ'	↔	[Voice, π, PART]
(ii)	*-ol*	'2OBJ'	↔	[Voice, π, PART, ADDR][35]
(iii)	*-a*	'3OBJ'	↔	[Voice, π]
(iv)	*-oku*	'INV'	↔	[Voice]

2.4.3 SAP vs. third person inverse

What we've seen above essentially crucially involves two morphological components: a dissimilatory Impoverishment rule, and the idea that the inverse theme sign is the elsewhere exponent of Voice. However, another important question revolves around how inverse marking correlates with the syntax.

The core question that most of the literature has focused on is whether or not inverse marking reflects a kind of syntactic inversion whereby the internal argument A-moves over the external

[35]The rules for *-ol* '2OBJ' and *-i* '1OBJ' are written like this to capture the fact that *-ol* '2OBJ' beats out *-i* '1OBJ' with first person inclusive objects, as in the following conjunct form:

(i) ahsim **-ol** -inoq
persuade$_{\text{TA}}$ **-2OBJ** -3:21CJ
'if she persuades us$_{\text{INCL}}$'

argument. Put a different way, the question is whether the Algonquian inverse displays a similar syntax to Austronesian object/patient voice (Haude and Zúñiga 2016, Oxford 2018, Zúñiga and Kittilä 2019). Both views, the inverse as purely about agreement and the inverse as syntactic, are well attested in the literature:

(72) a. *The Algonquian inverse is purely about agreement*

Dahlstrom (1991), Halle and Marantz (1993), Aissen (1997), Béjar and Rezac (2009), Lochbihler (2012), Thivierge (2016, 2017), Alsina and Vigo (2017), a.o.

b. *The Algonquian inverse involves syntactic inversion*

Rhodes (1976), McGinnis (1995), Bruening (2001b, 2005, 2009), Quinn (2006), Hamilton (2015c), Oxford (2019b), Hammerly (2020), a.o.

I think this is the wrong question to be asking, as neither answer is entirely correct. We need to instead be asking a more nuanced question, distinguishing between two kinds of inverse marking: the SAP INVERSE and the THIRD PERSON INVERSE. The SAP inverse refers to the use of the inverse marker with SAP objects—that is, in 3⟶SAP scenarios. The third person inverse refers to the use of the inverse marker with third person objects—that is, in hierarchy-violating 3⟶3 scenarios (OBV⟶PROX, IN⟶AN).

Following Grishin (2022) and Oxford (2023d), I'll be assuming a mixed view: the SAP inverse is purely about agreement, whereas the third person inverse involves syntactic inversion. As noted by Rhodes (1994:432), already the intuition that the SAP inverse and the third person inverse shouldn't be treated on par begins to emerge from comparing the distribution of inversion in the independent to the conjunct: in the independent, we get both SAP and third person inverses, but in the conjunct, there is only the third person inverse. In fact, across Algonquian, there is tremendous variation in the extent to which you get the SAP inverse in the conjunct (Oxford 2022)—Passamaquoddy is actually rather conservative in the absence of a conjunct SAP inverse[36]—but there is no variation at all in the distribution of the third person inverse: it's always available both in the independent and in the conjunct.

Another indication that there's something different about the SAP and third person inverses is that the SAP inverse is morphosyntactically conditioned, whereas the third person inverse is pragmatically/information-structurally conditioned. That is, given a 3⟶SAP scenario in the independent, inverse marking is *forced* given the features of the arguments and their grammatical roles. In contrast, given a 3⟶3 scenario, speakers have a choice whether to use direct or inverse marking, depending on which argument they want to highlight, in a similar way to how English speakers have a choice about whether to use active or passive voice. While in basic cases this goes hand-in-hand with proximate and obviative assignment, scenarios with two obviative arguments nicely demonstrate the optionality of the third person inverse. This occurs when both arguments are possessed by third persons (73), or when an argument is obviative under the influence of a matrix proximate (74):

[36]Proto-Algonquian essentially shares the same distribution of inversion as Passamaquoddy (Goddard 1967, 1979a). The one exception in contemporary Passamaquoddy is in the unspecified subject paradigm, where inverse marking has spread from the independent into the conjunct. This is a relatively recent phenomenon—compare the paradigms in Sherwood (1983, 1986), which lack inverse in the conjunct unspecified subject, to those in Francis and Leavitt (2008).

(73) a.

Raca	’-temis-`	**‘t-iyali=**	**nuhsuhkuw-a-wa-l**	Koles	’-posu-m-ol.
Roger	3-dog-OBV.PL	**3-around=**	**chase$_{TA}$-3OBJ-PL-OBV.SG**	Grace	3-cat-POSS-OBV.SG

‘Roger’s dogs$_{OBV}$ chased around Grace’s cat$_{OBV}$.’ (GP 2023.04.04)

b.

Koles	’-posu-m-ol	**‘t-iyali=**	**nuhsuhka-ku-`**	Raca	’-temis-`.
Grace	3-cat-POSS-OBV.SG	**3-around=**	**chase$_{TA}$-INV-OBV.PL**	Roger	3-dog-OBV.PL

‘Grace’s cat$_{OBV}$ was chased around by Roger’s dogs$_{OBV}$.’ (GP 2023.04.04)

(74) a.

Piyel	’-pawatom-on	[	Tigaw-ol	**’-pokehl-a-n**	olomuss-`	].
Peter	3-want$_{TI}$-N		Tiger-OBV.SG	**3-bit$_{TA}$-3OBJ-N**	dog-OBV.PL	

‘Peter wants Tiger$_{OBV}$ to bite the dogs$_{OBV}$.’ (GP 2023.04.04)

b.

Piyel	’-pawatom-on	[	olomuss-`	**’-pokehl-oku-ni-ya**	Tigaw-ol	].
Peter	3-want$_{TI}$-N		dog-OBV.PL	**3-bit$_{TA}$-INV-N-PL**	Riger-OBV.SG	

‘Peter$_{PROX}$ wants the dogs$_{OBV}$ to be bitten by Tiger$_{OBV}$.’ (GP 2023.04.04)

In (73), both *’temìs* ‘(his) dogs’ and *’posumol* ‘(her) cat’ are obviative because they are possessed by animate third persons, yet we still have a choice whether to use the direct (73a) or the inverse (73b). Similarly, in (74), the matrix proximate *Piyel* ‘Peter$_{PROX}$’ can cause all the embedded arguments (*Tigawol* ‘Tiger$_{OBV}$’ and *olomùss* ‘dogs$_{OBV}$’) to become obviative, and even so we still can choose to express the event either with the direct (74a) or the inverse structure (74b). Thus, while proximate-obviative assignment correlates with the third person inverse, it doesn’t directly condition it.

However, these observations, while suggestive, aren’t watertight arguments for the mixed view. Here, I’ll summarize three more conclusive arguments for the mixed view: *(i)* long-distance agreement into subordinative clauses, which is possible only with the highest embedded argument, indexes the third person external argument in SAP inverse scenarios, but the internal argument in third person inverse (Grishin 2022); *(ii)* the third person inverse allows the internal argument to bind into the external argument, something not possible in the direct (Bruening 2001b, 2005); and *(iii)* the third person inverse allows the internal argument to scope over the external argument (Bruening 2001b, 2005, 2008, 2009), not possible in the direct *or* the SAP inverse. We can thus conclude that the internal argument in the SAP inverse doesn’t A move over the external argument, but it does in the third person inverse.

Subordinative long-distance agreement

Grishin (2022) demonstrates that Passamaquoddy has an LDA construction involving subordinative-embedding verbs like *’pawatomuwan* ‘want’, *’kisehtuwan* ‘make’, *’kiseltomuwan* ‘let’, and *nokatomuwan* ‘fear’ in which the matrix verb agrees in person (but not number) with the highest argument in the embedded clause, using morphology usually found with recipients of ditransitive verbs. In the SAP inverse (3⟶SAP scenarios), it’s straightforward to verify that you get LDA with the external argument and not the internal argument:

(75) a.

Roger	**’-pawatom-uw-a-n**	[	Asawis-ol	nt-olintuwew-ku-n	].
Roger	**3-want$_{TI}$-APPL-3OBJ-N**		John-OBV.SG	1-sing.to$_{TA}$-INV-N	

‘Roger wants John to sing to me.’ (EM 2021.11.17)

b. *Roger **n-puwatom-a-ku-n** [Asawis(-ol) nt-olintuwew-ku-n].
Roger **1-want$_{TI}$-APPL-INV-N** John(-OBV.SG) 1-sing.to$_{TA}$-INV-N
Intended: ‘Roger wants John to sing to me.’ (EM 2021.11.17)

(76) a. Roger **’-pawatom-uw-a-n** [Winiw-ol nt-olahyem-ku-ne-n].
Roger **3-want$_{TI}$-APPL-3OBJ-N** Winnie-OBV.SG 1-play.with$_{TA}$-INV-N-1PL
‘Roger wants Winnie to play with us.’ (MA 2023.02.21)

b. *Roger **n-pawatom-a-ku-ne-n** [nt-olahyem-ku-ne-n Wini(w-ol)].
Roger **1-want$_{TI}$-APPL-INV-N-1PL** 1-play.with$_{TA}$-INV-N-1PL Winnie(-OBV.SG)
Intended: ‘Roger wants Winnie to play with us.’ (MA 2023.02.21)

(77) a. Roger **’-kiseht-uw-a-n** [wasis-\` tehpu n-uskicinu-westuwam-ku-ne-n].
Roger **3-make$_{TI}$-APPL-3OBJ-N** kid-OBV.PL only 1-Indian-speak.to$_{TA}$-INV-N-1PL
‘Roger made the kids only speak to us in Passamaquoddy.’ (EM 2022.09.28)

b. *Roger **n-kiseht-a-ku-ne-n** [wasis-\` tehpu n-uskicinu-westuwam-ku-ne-n].
Roger **1-make$_{TI}$-APPL-INV-N-1p** kid-OBV.PL only 1-Indian-speak.to$_{TA}$-INV-N-1PL
Intended: ‘Roger made the kids only speak to us in Passamaquoddy.’ (EM 2022.09.28)

In the acceptable (a) examples, the matrix verb agrees with a third person animate object—the embedded external argument. In the unacceptable (b) examples, we’ve attempted agreement with an SAP object—the embedded internal argument. The contrast between the (a) and (b) examples indicates that the SAP inverse does not involve syntactic inversion, or else that should have fed LDA, counter to fact.

Interestingly, in IN→SAP scenarios, there seems to be variation across speakers. Whether this is idiolectal or dialectal variation I do not know. For our Wolastoqey speakers, in IN→SAP scenarios if we try to get LDA with the SAP object, the result is ungrammatical:

(78) a. *Sapet **n-pawatom-a-ku-n** [kiwhosuwasq n-kikuh-uku-n].
Elizabeth **1-want$_{TI}$-APPL-INV-N** flagroot 1-heal$_{TA}$-INV-N
Intended: ‘Elizabeth wants flagroot to heal me.’ (EM, RP 2022.05.09)

b. Sapet ’-pawatom-on [kiwhosuwasq n-kikuh-uku-n].
Elizabeth 3-want$_{TI}$-N flagroot 1-heal$_{TA}$-INV-N
‘Elizabeth wants flagroot to heal me.’ (EM, RP 2022.05.09)

In (78a), we’ve attempted to get *’pawatomuwan* ‘want’ to agree with the embedded 1SG object—not possible. The only way to express this is to use a non-LDA form of *’pawatomon* ‘want’. This indicates to us that the inanimate external argument remains the highest argument in the embedded clause, as if there had been syntactic inversion we should have gotten LDA with the embedded object. Thus, for some speakers, all SAP inverse contexts lack syntactic inversion.

For other speakers, however, it *is* possible to get LDA with the embedded SAP object in IN→SAP scenarios—this was possible for (at least) one Passamaquoddy speaker:

(79) a. Raca **n-pawatom-a-ku-n** [n-kikehl-oku-n 'pisun].
Roger **1-want$_{TI}$-APPL-INV-N** 1-heal$_{TA}$-INV-N medicine
'Roger wants the medicine to heal me.' (GP 2023.04.18)

b. Keqsey Raca **pawatom-uw-i-t** [n-kikehl-oku-n]?
what Roger **IC.want$_{TI}$-APPL-1OBJ-3CJ** 1-heal$_{TA}$-INV-N
'What does Roger want to heal me?' (GP 2023.04.18)

For these speakers, there *is* syntactic inversion in IN→SAP scenarios, in contrast to 3AN→SAP. Later, we will see additional converging evidence from quantifier scope that confirms this split in grammars.

Turning to the third person inverse, there is a snag: if there are two animate arguments downstairs, we won't be able to tell which one we get LDA with, as the subordinative brand of LDA only tracks person features, not number features. However, if we examine IN→3 scenarios, we'll be able to tell if we're agreeing with the embedded object or not.

(80) a. Sapet **'-pawatom-uw-a-n** [Piyel-ol 't-eksqi-hka-ku-n
Elizabeth **3-want$_{TI}$-APPL-3OBJ-N** Peter-OBV.SG 3-sneeze$_{AI}$-CAUS-INV-N
tehpiseweya-l].
pepper-IN.PL
'Elizabeth wants pepper to make Peter sneeze.' (GP, MA, RP 2022.04.04)

b. Sapet **'-pawatom-uw-a-n** [kiwhosuwasq '-kikuh-uku-n Lacaw-ol].
Elizabeth **3-want$_{TI}$-APPL-3OBJ-N** flagroot 3-heal$_{TA}$-INV-N Roger-OBV.SG
'Elizabeth wants flagroot to heal Roger.' (EM, RP 2022.05.09)

c. **N-kiseht-uw-a-n** [wasis '-kiptehka-ku-n n-utapakon].
1-make$_{TI}$-APPL-3OBJ-N kid 3-knock.over$_{TA}$-INV-N 1-sled
'I made my sled knock over the child.' (EM 2022.10.12)

Here, in contrast to the IN→SAP examples above (78), we *are* able to get LDA with the embedded internal argument, demonstrating that in the third person inverse the internal argument does move over the external argument. Thus, the behavior of LDA into subordinative clauses demonstrates that the SAP inverse is purely morphological, whereas the third person inverse involves genuine syntactic inversion. Finally, there is variation in IN→SAP scenarios: for some speakers, there is no syntactic inversion, but for others there is.

Variable binding and weak crossover

Additional evidence for syntactic inversion in the third person inverse comes from variable binding and weak crossover (Bruening 2001b, 2005). The data shows that in the direct, only the external argument can bind into the internal argument, and not vice-versa—but in the third person inverse, both directions of binding are possible. The conclusion we can draw from this is that the third person inverse involves syntactic inversion, with the internal argument A-moving over the external argument, and that this step of movement can optionally reconstruct for variable binding.

Let's start with the direct, in which the external argument can bind into the internal argument but not vice-versa. In the examples that follow, I will bold the binder and underline the phrase containing the bound variable. Observe the direct examples below:

(81) a. **Psi=te** **ehpit** '-kosiciy-a-l nekom=ote Ø-nican-ol.
all=EMPH **woman** 3-know$_{TA}$-3OBJ-OBV.SG 3SG=EMPH 3-child-OBV.SG
'**Every woman**$_i$ knows her own$_i$ child.' (Bruening 2001b: 99)

b. **Yat-te**[38] **wen** Ø-nomiy-a-l [skitapi-yil nenuw-a-c-il].
each **who** 3-see$_{TA}$-3OBJ-OBV.SG man-OBV.SG IC.know$_{TA}$-3OBJ-3CJ-OBV.SG
'**Each person**$_i$ saw the man he$_i$ knows.' (Bruening 2001b: 111)

In (81a), the universal quantifier external argument *psi-te ehpit* 'every woman' is able to bind the overt pronoun possessor of the internal argument *nekom-ote* 'her own'. In (81b), the distributive universal quantifier external argument *yat-te wen* 'each person' is able to bind a null pronoun contained in a relative clause modifying the internal argument *skitapiyil nenuwacil* 'the man he knows'. In both cases we have a direct configuration, as indicated by the external argument being proximate and the internal argument being obviative, as well as the presence of the third person object marker *-a* on the matrix verb.

Note that this is independent of word order—the internal argument can be bound even if it linearly precedes the external argument:

(82) a. W-ikuwoss-ol **psi=te** **wen** '-koselom-a-l.
3-mother-OBV.SG **all=EMPH** **who** 3-love$_{TA}$-3OBJ-OBV.SG
'**Everyone**$_i$ loves his$_i$ mother.' (Bruening 2001b: 112)

b. 'T-akoma-l ma=te **psi=te** **wen** '-kisi= wolehl-a-wi-yil.
3-snowshoe-OBV.SG NEG=EMPH **all-EMPH** **who** 3-PFV= fix$_{TA}$-3OBJ-NEG-OBV.SG
'**Everyone**$_i$ didn't fix his$_i$ showshoe.' (Bruening 2001b: 113)

In both these examples, the external argument *psi-te wen* 'everyone' is able to bind the possessor of the internal argument, yet the internal argument linearly precedes the external argument. This shows that whatever kind of scrambling is involved in deriving these word orders is able to reconstruct for variable binding.

In contrast, it's impossible for the internal argument to bind into the external argument in direct configurations:

(83) a. [Skitap musqitaham-a-c-il] '-koti= tqon-a-l **psi=te**
man IC.hate$_{TA}$-3OBJ-3CJ-OBV.SG 3-going.to= arrest$_{TA}$-3OBJ-OBV.SG **all=EMPH**
weni-l.
who-OBV.SG
'A man that he$_{*i,\checkmark j}$ hates will arrest **everyone$_i$**.' (Bruening 2001b: 112)

[38] The distributive quantifier *yat-te* is spelled in the dictionary (Francis and Leavitt 2008) with the hyphen, as it is transparently composed of the remote distal demonstrative *yat* 'that one (yonder)' plus the "emphatic" clitic *=(o)te*. However, the idiomatic quantificational reading only arises from the sum of these two parts—thus, I gloss this morphologically complex unit simply as 'each', without decomposing it into its individual parts.

b. [Wen wik-ahto-k] '-cuwi= mici-n **psi=te** **keq**.
who IC.like-eat$_{\text{TI}}$-3CJ 3-must= eat$_{\text{TI}}$-N **all-EMPH** **what**
'Whoever likes it$_{*i,\checkmark j}$ has to eat **everything**$_i$.' (Bruening 2001b:112)

Both these examples are acceptable, just not on the bound reading. In (83a), the internal argument *psi-te wenil* 'everyone' cannot bind into the relative clause modifying the external argument *skitap musqitahamacil* 'a man that he hates'—only a disjoint, non-covarying reading of the relative clause subject is available. Similarly, in (83b), the internal argument *psi-te keq* 'everything' cannot bind into the free relative external argument *wen wikahtok* 'whoever likes it/them'—only a non-covarying reading of the relative clause object is available. For instance, (83b) would be possible in a context where the requirement is that whoever likes all the dishes at the party needs to eat all the dishes. This reading would involve accidental coreference between a plural null object of *wikahtok* 'like' (a verb form ambiguous for the number of its object) and the matrix object *psi-te keq*. However, crucially, the reading that is unavailable is the one where every party-goer only likes one dish, and they have to eat that one dish—and that is the reading that must be derived by variable binding ('∀x, whoever likes x has to eat x').

We get similar results with *wh* quantifiers—in other words, there are weak crossover (WCO) effects. In the direct, *wh* external arguments can bind into internal arguments:

(84) a. **Wen** ali-khahsi-t w-ikuwoss-ol?
who IC.around-look.for$_{\text{AI}}$-3CJ 3-mother-OBV.SG
'**Who**$_i$ is looking around for his$_i$ mother?' (Bruening 2005: 11)

b. **Wen** cel kis-cem-a-t '-tus-ol?
who even IC.PFV-kiss$_{\text{TA}}$-3OBJ-3CJ 3-daughter-OBV.SG
'**Who**$_i$ kissed his$_i$ daughter?' (Bruening 2005: 13)

This is exactly the same behavior as we saw above, except with *wh* items instead of universal quantifiers.

However, in the direct, the reverse is not possible: *wh* internal arguments cannot bind into external arguments:

(85) a. ***Keqsey** pett-aqoso-k [not kis-uwikho-k]?
what IC.accidentally-burn$_{\text{TI}}$-3CJ that.PROX.SG IC.PFV-write$_{\text{TI}}$-3CJ
*'**What**$_i$ did the one who wrote it$_i$ accidentally burn?' (Bruening 2001b: 115)

b. ***Keqsey** [not kisihta-q] napisqahma-t?
what that.PROX.SG IC.make$_{\text{TI}}$-3CJ IC.trip.over$_{\text{AI+O}}$-3CJ
*'**What**$_i$ did the one who made it$_i$ trip over?' (Bruening 2005: 11)

Thus, WCO exists in Passamaquoddy, and it is specifically found in direct contexts, where the external argument outranks the internal argument. Taking this together with the results of the examples of non-*wh* variable binding, we can conclude that the external argument c-commands the internal argument in the direct, and the internal argument cannot A-move over the external argument.

Now, turning our attention to the third person inverse, we find now that previously unavailable bound readings are now possible. Now internal arguments can bind into external argument:

(86) a. Kat=op **wen** Ø-nokol-oku-wi-hil Ø-woli= w-itapi-hil.
NEG=CF **who** 3-abandon$_{\text{TA}}$-INV-NEG-OBV.SG 3-good= 3-friend-OBV.SG
'His$_i$ best friend wouldn't abandon **anyone**$_i$.' (Bruening 2005: 13)

b. **Psi=te** **wen** '-kosiciy-uku-l w-ikuwoss-ol.
all=EMPH **who** 3-know$_{\text{TA}}$-INV-OBV.SG 3-mother-OBV.SG
'His$_i$ mother knows **everyone**$_i$.' (Bruening 2005: 13)

And additionally, we obviate WCO effects with *wh* questions in the inverse:

(87) a. **Wen** pihce w-itapi-hil nekol-iht kcihku-k?
who long.ago 3-friend-OBV.SG IC.abandon$_{\text{TA}}$-INV.3SG.CJ forest-LOC
'**Who**$_i$ did his$_i$ friend abandon in the forest a long time ago?' (Bruening 2001b: 114)

b. **Wen** pihce wenitaham-iht '-qoss-ol?
who long.ago IC.forget$_{\text{TA}}$-INV.3SG.CJ 3-son-OBV.SG
'**Who**$_i$ did his$_i$ son forget about long ago?' (Bruening 2001b: 114)

Thus, we can conclude that the inverse involves A-moving the internal argument over the external argument—in other words, the third person inverse involves syntactic inversion.[39]

It's also worth noting that the third person inverse strictly *increases* binding options—it's still possible for the external argument to bind into the internal argument in the third person inverse:

(88) a. Ma=te **keq** Ø-utomeya-ku-w-on tepelto-k.
NEG=EMPH **what** 3-bother$_{\text{TA}}$-INV-NEG-N IC.own$_{\text{TI}}$-3CJ
'**Nothing**$_i$ bothers the one that owns it$_i$.' (Bruening 2001b: 131)

b. Ma=te **olomuss-ol** '-pokehl-oku-wi-yil wen wel-ankeyuw-a-t.
NEG=EMPH **dog-OBV.SG** 3-bite$_{\text{TA}}$-INV-NEG-OBV.SG who IC.good-care.for$_{\text{TA}}$-3OBJ-3CJ
'**No dog**$_i$ bites someone who takes care of it$_i$.' (EM 2023.03.28)

Again, this isn't sensitive to word order: the external argument of the third person inverse can bind backwards into the internal argument:

(89) Wen wel-ankeyuw-a-t ma=te **olomuss-ol** '-pokehl-oku-wi-yil.
who IC.good-care.for$_{\text{TA}}$-3OBJ-3CJ NEG=EMPH **dog-OBV.SG** 3-bite$_{\text{TA}}$-INV-NEG-OBV.SG
'**No dog**$_i$ bites someone who takes care of it$_i$.' (EM 2023.03.28)

[39]It would be difficult to replicate similar data with the SAP inverse, as we would need to somehow ensure that SAP arguments can be binders. This isn't impossible—one would want to test the availability of sloppy readings with ellipsis and focus constructions involving so-called "fake indexicals", standardly thought to be derived from structures involving binding (Sag 1976, Kratzer 2009, a.m.o.). I leave investigation of these issues for future research.

Thus, in the third person inverse, both directions of binding are possible. A reasonable conclusion we can draw from this is that the step of A movement found in the third person inverse is able to reconstruct for variable binding purposes.

Quantifier scope

Along similar lines, scope interactions between multiple quantifiers also indicate that only in the third person inverse do internal arguments A-move over external arguments. The general picture of the data is this: both the direct and the SAP inverse display scope rigidity, as external arguments must scope over internal arguments, but there is scopal ambiguity in the third person inverse. The conclusion is that same as that drawn from the variable binding data: there is syntactic inversion in the third person inverse which can optionally reconstruct.

Let's start by reviewing Bruening's (2001b, 2005, 2008, 2009) observations about the scopal possibilities in the third person direct and inverse. First, he finds that the third person direct is scope rigid. We can test this with configurations involving an existential quantifier external argument and a universal quantifier internal argument—in this case, the inverse scope possibility must be derived by standard scope-taking mechanisms (i.e. movement/QR), rather than an *in-situ* mechanism available to indefinites (which are known to easily get wide scope readings), like choice functions (Reinhart 1997, Kratzer 1998, Matthewson 1999, a.m.o.) or a singleton restrictor (Schwarzschild 2002).[40] In this configuration, in the direct, we cannot get inverse scope, as demonstrated in (90) below. Throughout this section, I will bold the external argument and underline the internal argument.

(90) a. **Skitap** psi=te '-sakolon-a-\` puhtaya-\`.
man all=EMPH 3-hold$_{\text{TA}}$-3OBJ-OBV.PL bottle-OBV.PL
'**A man** is holding all the bottles.' (Bruening 2009: 434)
$\exists \gg \forall$, $^*\forall \gg \exists$

b. **Pesq skitap** 't-apote-pi-n psi=te malihkiy-ehs-is-\`.
one man 3-lean.against-sit$_{\text{AI+O}}$-N all=EMPH barrel-DIM-DIM-OBV.PL
'**One man** is sitting leaning against all the barrels.' (Bruening 2009: 438)
one $\gg \forall$, $^*\forall \gg$ *one*

[40] Indeed, Bruening shows that indefinite internal arguments can take wide scope in the direct, suggesting that such alternative scope-taking mechanisms are also available for Passamaquoddy indefinites as well, both bare indefinites as well as those headed by *pesq* 'one':

(i) a. **Putepi-yik yat-te wen** 't-askikom-a-l nomehs-ol.
whale-PROX.PL each who 3-bite$_{\text{TA}}$-3OBJ-OBV.SG fish-OBV.SG
'**The whales** are **each** biting a fish. (Bruening 2008: 93)
$\exists \gg \forall$, $\forall \gg \exists$

b. **Psi=te** '-poth-a-wa-l pesku-wol nomehs-ol.
all=EMPH 3-hook$_{\text{TA}}$-3OBJ-PL-OBV.SG one-OBV.SG fish-OBV-SG
'**Everyone** hooked one fish. (Bruening 2009: 433)
one $\gg \forall$, $\forall \gg$ *one*

In these examples we can get surface scope (∃ ≫ ∀), but not inverse scope (∀ ≫ ∃). Thus, scope is rigid in the direct.

Note that the word order does not matter here—having the internal argument linearly precede the external argument does not give us a new scope possibility:

(91) a. Psi=te kesinuk-hoti-c-ik **taktal** ’t-ankeyuw-a-\`.
all=EMPH IC.be.sick$_{\text{AI}}$-PL-3CJ-PROX.PL **doctor** 3-care.for$_{\text{TA}}$-3OBJ-OBV.PL
‘**A doctor** is taking care of all the sick people.’ (Bruening 2001b: 112)
∃ ≫ ∀, *∀ ≫ ∃

b. Psi=te malihkiy-ehs-is-\` **pesq** **skitap** ’t-apote-pi-n.
all=EMPH barrel-DIM-DIM-OBV.PL **one** **man** 3-lean.against-sit$_{\text{AI+O}}$-N
‘**One man** is sitting leaning against all the barrels.’ (Bruening 2009: 438)
one ≫ ∀, *∀ ≫ *one*

Whatever kind of scrambling is involved in generating these word orders must obligatorily reconstruct for scope.

In contrast, if we take a look at the third person inverse, we no longer get scope rigidity—both scope possibilities are now available. This is true no matter whether we have an existential external argument and a universal internal argument (92a) or vice versa (92b):

(92) a. Psi=te puhtaya-k ’-sakolon-oku-wa-l **pesku-wol** **skitapi-yil**.
all=EMPH bottle-PROX.PL 3-hold$_{\text{TA}}$-INV-PL-OBV.SG **one-OBV.SG** **man-OBV.SG**
‘**One man** is holding all the bottles.’ (Bruening 2009: 434)
one ≫ ∀, ∀ ≫ *one*

b. Skitap **psi=te** ‘-qilta-ku-\` **putepi-yi**.
man **all=EMPH** 3-attack$_{\text{TA}}$-INV-OBV.PL **whale-OBV.PL**
‘**All the whales** are attacking a man.’ (Bruening 2009: 435)
∀ ≫ ∃, ∃ ≫ ∀

These examples taken together indicate that the third person inverse really does allow for both surface and inverse scope, as we cannot make use of an *in situ* strategy for deriving the scope of indefinites to capture the ambiguity of both (92a) and (92b). The natural conclusion we can draw from this data is that the internal argument A-moves over the external argument in the third person inverse, allowing for the internal argument to scope over the external argument, but also allowing for the possibility of reconstruction for scope.

Our consultants pattern with the judgments reported by Bruening—in the third person inverse, the internal argument can scope over the external argument, no matter the word order. This is true both both the OBV⟶PROX inverse as well as the IN⟶3 inverse:

(93) Context 1: My three cats all came home injured: one was bitten by a snake, one was scratched by a raccoon, and the third was stung by a bee.
Context 2: My three cats all got stung by the same angry bee.

a. Psi=te n-posu-m-ok '-kisi= ksehl-oku-wa-l **(pesku-wol)** **weyossis-ol**.
all=EMPH 1-cat-POSS-PROX.PL 3-PFV= hurt$_{\text{TA}}$-INV-PL-OBV.SG **(one-OBV.SG)** **animal-OBV.SG**
'All of my cats were injured by **some/one animal**.' (EM 2023.08.22)
Context 1 (∀ ≫ ∃): ✓; Context 2 (∃ ≫ ∀): ✓

(94) Context 1: Each kid picked a different scary summer reading book from the list.
Context 2: One scary summer reading book was assigned to the whole class, which each kid read.

a. Psi=te wasis-ok '-sikte-hpawol-oku-ni-ya **(pesqon)** **wikhikon**.
all=EMPH kid-PROX.PL 3-very-scare$_{\text{TA}}$-INV-N-PL **(one.IN)** **book**
'Each kid was scared by **a/one book**.' (EM 2023.08.22)
Context 1 (∀ ≫ ∃): ✓; Context 2 (∃ ≫ ∀): ✓

b. **Pesqon** **wikhikon** psi=te wasis-ok '-sikte-hpawol-oku-ni-ya.
one.IN **book** all=EMPH kid-PROX.PL 3-very-scare$_{\text{TA}}$-INV-N-PL
'Each kid was scared by **one book**.' (EM 2023.08.22)
Context 1 (∀ ≫ ∃): ✓ ; Context 2 (∃ ≫ ∀): ✓

In (93) we replicate Bruening's results with the OBV⟶PROX inverse, where we can see that the proximate internal argument can scope over the obviative external argument. In (94) we see the same thing with the IN⟶3 inverse, and here we additionally can note that the word order doesn't change the scope properties of the sentence.

Bruening (2001b, 2005, 2008, 2009) only investigates the scope properties of the third person direct and inverse. What about the SAP direct and inverse—is it possible to test the scope of SAPs? Passamaquoddy allows for certain kinds of quantified SAPs, like *psi-te nilun* 'all of us' and *psi-te kiluwaw* 'all of y'all'—thus, we can test the scope possibilities of these expressions.[41]

In the SAP⟶3 direct, universally quantified SAP external arguments can scope over existentially quantified internal arguments, whether they're animate or inanimate, and whether they are bare indefinites or introduced by *pesq* 'one':

(95) Context: Me, Elise, and Tanya all love cats, and have recently decided to adopt. I adopted one cat, Elise adopted one cat, and Tanya adopted one cat—a total of three cats got adopted.

a. **Psi=te** **nilun** n-kisi= mace-ph-a-n (pesq) psuwis.
all=EMPH **1PL** 1-PFV= come-bring$_{\text{TA}}$-3OBJ-1PL (one) cat
'**Each of us** brought home a cat.' (EM 2023.04.11)
∀ ≫ ∃

(96) Context: Me, Norvin, and Elise have all been attending a canoe-building workshop for several weeks. At the end of the workshop we each have made one canoe—I made one, Norvin made one, and Elise made one, resulting in three canoes in total.

[41] Unfortunately, I wasn't able to find any equivalent of expressions like 'one of us' or 'one of y'all'—at least one that clearly acted like an SAP rather than a third person—so I was not able to test all the possible scope combinations, only those involving universally quantified SAPs.

a. **Psi=te nilun** n-kisihtu-ne-n (pesqon) oqiton.
all=EMPH 1PL 1-make$_{TI}$-N-1PL (one.IN) canoe
'**Each of us** made a canoe.' (GP 2023.04.04)
∀ ≫ ∃

So, perhaps unsurprisingly, SAP external arguments can scope over third person internal arguments. Importantly, this data demonstrates that expressions like *psi-te nilun* really can get quantificational readings (rather than, for instance, scopeless cumulative readings).

However, strikingly, it's not possible for a universally quantifed SAP internal argument to scope over a third person external argument in the SAP inverse:

(97) Context: Me, Edwina, and Elise are out on a walk, when all of a sudden three angry dogs come running out. One bites me, one bites Edwina, and one bites Elise.

a. #Psi=te nilun n-kisi= pokehl-oku-n **pesq olomuss**.
all=EMPH 1PL 1-PFV= bite$_{TA}$-INV-1PL **one dog**
Intended: All of us were each bitten by **one dog**.' (EM 2023.03.28)
*∀ ≫ *one*
EM: "If you say *pesq olomuss* it's only one dog."

b. Psi=te nilun n-kisi= pokehl-oku-nnu-k **nihiw-ok olomuss-ok**.
all=EMPH 1PL 1-PFV= bite$_{TA}$-INV-1PL-PROX.PL **three-PROX.PL dog-PROX.PL**
'**Three dogs** bit all of us.' (EM 2023.03.28)
three ≫ ∀

We cannot use the sentence in (97a) to describe this context, even though that would be the "surface scope" reading given the word order. Thus, the SAP inverse is scope rigid in the same way as the direct—the external argument must scope over the internal argument, and the reverse is not possible. In order to describe this situation, we need to change the external argument from *pesq olomuss* 'one dog' to *nihiwok olomussok* 'three dogs' (97b), which would allow for the EA ≫ IA scope configuration to be true in this context.

If we change the context so that there's only one dog in total, resulting in a context compatible with the *one* ≫ ∀ reading, then this sentence becomes acceptable again, no matter the word order:

(98) Context: Me, Edwina, and Elise are out on a walk, when all of a sudden an angry dog comes running out and bites each of us.

a. **Pesq meciki-t olomuss** n-kisi= pokehl-oku-n psi=te nilun.
one IC.be.bad$_{AI}$-3CJ dog 1-PFV= bite$_{TA}$-INV-1PL all=EMPH 1PL

b. Psi=te nilun n-kisi= pokehl-oku-n **pesq meciki-t olomuss**.
all=EMPH 1PL 1-PFV= bite$_{TA}$-INV-1PL **one IC.be.bad$_{AI}$-3CJ dog**
Both: '**One bad dog** bit all of us.' (EM 2023.03.28)
one ≫ ∀

However, we can't draw too many conclusions from this particular data point, given that existential quantifiers seem to be able to take exceptionally wide scope without movement. Nevertheless, the data in (97) and (98) combined show us that in the SAP inverse, only the external argument can scope over the internal argument. Thus, there is no step of object-inverting A movement in the SAP inverse, in contrast to the third person inverse.

Turning now to IN→SAP scenarios, those speakers for whom there is no syntactic inversion in these cases, as demonstrated by subordinative LDA (78), are not able to get interpretations where universally quantified SAP internal arguments scope over inanimate external arguments, no matter the word order:

(99) Context: I read one book about zombies which scared me, Norvin read a different book about werewolves which scared him, and Elise read a third book about vampires which scared her.

a. #Psi=te nilun n-siktehpawol-oku-ne-n **pesqon wikhikon**.
all=EMPH 1PL 1-scare$_{\text{TA}}$-INV-N-1PL **one.IN book**
Intended: 'Each of us was scared by **one book**.' (EM 2023.05.30)
$*\forall \gg$ *one*
EM: "It doesn't sound right to me…because you're saying one book."

b. #**Pesqon wikhikon** psi=te nilun n-siktehpawol-oku-ne-n.
one.IN book all=EMPH 1PL 1-scare$_{\text{TA}}$-INV-N-1PL
Intended: 'Each of us was scared by **one book**.' (EM 2023.05.30)
$*\forall \gg$ *one*

Neither of these sentences accurately describes the context given, indicating that the internal argument is unable to scope over the external argument. The consultant's comments indicate that in these sentences, *pesqon wikhikon* 'one book' really commits the speaker to there being only one book total—that is, a wide-scope interpretation. Indeed, these sentences become good in a wide-scope context like the following—again, word order doesn't seem to matter:

(100) Context: Me, Norvin, and Elise all read the same scary book.

a. Psi=te n-siktehpawol-oku-ne-n **pesqon wikhikon**.
all=EMPH 1-scare$_{\text{TA}}$-INV-N-1PL **one.IN book**

b. **Pesqon wikhikon** psi=te n-siktehpawol-oku-ne-n.
one.IN book all=EMPH 1-scare$_{\text{TA}}$-INV-N-1PL
Both: '**One book** scared all of us.' (EM 2023.05.30)
one $\gg \forall$

In order to accurately describe the context with three books total, we'd need to change *pesqon wikhikon* 'one book' to *nahanul wikhikonul* 'three books', which would then allow for the wide scope reading of the indefinite to be true in the context:

(101) Context: same as (99).

a. **Nahanu-l** **wikhikon-ol** n-siktehpawol-oku-ne-nnu-l psi=te nilun.
three.IN-IN.PL **book** 1-scare$_{\text{TA}}$-INV-N-1PL-IN.PL all=EMPH 1PL
'**Three books** scared all of us.' (EM 2023.04.11)
three ≫ ∀
EM: "That sounds real good."

b. Psi=te n-siktehpawol-oku-ne-nnu-l nilun **nahanu-l** **wikhikon-ol**.
all=EMPH 1-scare$_{\text{TA}}$-INV-N-1PL-IN.PL 1PL **three.IN-IN.PL** **book-IN.PL**
'**Three books** scared all of us.' (EM 2023.05.30)
three ≫ ∀

Thus, the evidence from both subordinative LDA as well as quantifier scope shows us that certain speakers lack syntactic inversion in IN⟶SAP scenarios.

Strikingly, speakers that *do* allow subordinative LDA with SAP objects in IN⟶SAP scenarios (79) are also able to get readings where universal quantified SAP objects scope over inanimate external arguments—and, like before, word order doesn't matter:

(102) Context: same as (99).

Psi=te nilun n-siktehpawol-oku-ne-n **pesqon** **wikhikon**.
all=EMPH 1PL 1-scare$_{\text{TA}}$-INV-N-1PL **one.IN** **book**
'Each of us was scared by **one book**.' (GP 2023.04.18)
∀ ≫ *one*

(103) Context: It was so cold that the four of us each had to wear two hats to keep warm, so a total of eight hats were worn between us.

a. Psi=te nilun n-kis-uwuh-uku-ne-nnu-l **nisonu-l** **ahsosuwon-ol**.
all=EMPH 1PL 1-PFV-warm$_{\text{TA}}$-INV-N-1PL-IN.PL **two.IN-IN.PL** **hat-IN.PL**

b. **Nisonu-l** **ahsosuwon-ol** psi=te nilun n-kis-uwuh-uku-ne-nnu-l.
two.IN-IN.PL **hat-IN.PL** all=EMPH 1PL 1-PFV-warm$_{\text{TA}}$-INV-N-1PL-IN.PL
Both: 'Each of us was kept warm by **two hats**.' (GP 2023.04.04)
∀ ≫ *two*

Again, subordinative LDA and quantifier scope give us the same result for these speakers: IN⟶SAP scenarios involve syntactic inversion.

The evidence from LDA into subordinative clauses, variable binding, and quantifier scope thus all dovetails together to support the mixed view of inversion in Passamaquoddy: the SAP inverse doesn't involve syntactic inversion (as demonstrated by subordinative LDA and quantifier scope), whereas the third person inverse does (as demonstrated by subordinative LDA, variable binding, and quantifier scope). Additionally, there is variation in IN⟶SAP scenarios: for some speakers these involve syntactic inversion, but for others they do not. I won't commit to any particular proposal for how to mechnically derive this state of affairs, as this doesn't crucially affect anything I'll say in this dissertation, though see Oxford (2023d) for a worked-out proposal that's compatible with the claims I'll make. The takeaway conclusions from this section are the following three components to the inverse: a dissimilatory Impoverishment rule, the idea that the inverse is a default exponent for Voice that appears when Voice doesn't have φ features, and the mixed view of the syntax of the inverse:

(104) a. Dissimilatory Impoverishment (Kinyalolo's Constraint):
If Voice and Infl are featurally identical due to having agreed with the same goal, delete the φ features on Voice.

b. Vocabulary items (based on Oxford 2019b: 980):

(i)	*-i*	'1OBJ'	↔	[Voice, π, PART]
(ii)	*-ol*	'2OBJ'	↔	[Voice, π, PART, ADDR]
(iii)	*-a*	'3OBJ'	↔	[Voice, π]
(iv)	*-oku*	'INV'	↔	[Voice]

c. The mixed view:
The SAP inverse is purely morphological (the internal argument doesn't A-move over the external argument), whereas the third person inverse is syntactic (the internal argument does A-move over the external argument).

2.5 Obviation

Now that we've gone through the basics of Algonquian syntax, we can now turn to the morphosyntactic distribution of obviative marking. Recall that the proximate-obviative contrast, at least descriptively, roughly splits third person referents into the one that's "highlighted" or "prominent", in some sense, which is proximate, and all the others, which are obviative. Impressionistically, it appears that obviation in Passamaquoddy is much more syntactic than it is in other languages for which it's been studied, like Blackfoot (Bliss 2005, 2017, Genee 2009), Cree (Wolfart 1973: §2.2, Russell 1991, 1996, Cook and Muehlbauer 2006, Oshima 2007, Muehlbauer 2008, 2015), Meskwaki (Goddard 1984, 1990a, Thomason 1995, 2003, Dahlstrom 2017a), Ojibwe (Rhodes 1976: Ch. 8, 1990a, 2017, Grafstein 1984, Hammerly 2020, 2023, Hammerly et al. 2022), and Mi'gmaq (Little and Moroney 2016), among others.

In these languages, the choice of proximate-obviative marking in certain cases is free, with corresponding semantic/pragmatic effects. For instance, it helps disambiguate the reference of third person pronouns, like in Mi'gmaq (proximate referents bolded, and obviatives underlined):

(105) **Susan-Ø** gejgapa'l-a-**Ø**-pn-n Mali-al...
Susan-PROX.SG scratch$_{TA}$-3OBJ-**3**-PRET-OBV.SG Mali-OBV.SG
'**Susan$_{PROX}$** scratched Mali$_{OBV}$...'

a. ...toqo enmie-**Ø**-p-**Ø**.
then go.home$_{AI}$-**3**-PRET-**PROX.SG**
'...then **she$_{PROX}$ (Susan)** went home.'

b. ...toqo enmie-ni-Ø-pn-n.
then go.home$_{AI}$-OBV-3-PRET-OBV.SG
'...then she$_{OBV}$ (Mali) went home.' Mi'gmaq (Little and Moroney 2016: 72)

The first conjunct of this coordination sets up two discourse referents, Susan (proximate) and Mali (obvative), and whether you have obviative agreement on the verb in the second conjunct disambiguates where Susan left (proximate agreement) or Mali left (obviative agreement), demonstrating how obviation in Mi'gmaq can be semantically/pragmatically determined, rather than purely syntactically determined. In this case, it's utilized for reference tracking.

In Passamaquoddy, strikingly, we do not get this same behavior. We cannot use obviation for reference tracking in this same way:

(106) **Tuma-Ø** '-kisi= nisu-kam-a-l Maliw-ol...
Tom-PROX **3**-PFV= two-dance.with$_{TA}$-3OBJ-OBV.SG Molly-OBV.SG
'**Tom$_{PROX}$** danced with Molly$_{OBV}$...' (EM, RP 2022.06.06)

a. ...nit=te=na 't-ahcuwi= macaha-n.
then=EMPH=ADD 3-have.to= leave$_{AI}$-N
'...and then **he$_{PROX}$ (Tom)** had to go (home).'[42] (EM, RP 2022.06.06)

b. *...nit=te=na 't-ahcuwi= macaha-li-n.
then=EMPH=ADD 3-have.to= leave$_{AI}$-OBV-N
Intended: '...and then she$_{OBV}$ (Molly) had to go (home).' (EM, RP 2022.06.06)

In contrast to Mi'gmaq we cannot inflect the verb in the second conjunct for an obviative subject (106b), even if that might help disambiguate the reference of the null pronoun. Instead, the only way to unambiguously refer back to Molly in the second conjunct is to repeat *Mali*:

(107) ...nit=te=na 't-ahcuwi= macaha-n Mali.
then=EMPH=ADD 3-have.to= leave$_{AI}$-N Molly
'...and then Molly had to go (home).' (EM, RP 2022.06.06)

Importantly, *Mali* 'Molly' has become *proximate* in this conjunct, even though she was obviative in the first conjunct. Thus, it seems like Passamaquoddy obviation is somehow qualitatively different from obviation in the other Algonquian languages, at least those for which obviation has received some attention.

As we'll see in this section, obviation in Passamaquoddy is essentially purely syntactically determined, a sentiment echoed by Bruening (2001b §2.4.5). Similar syntactic restrictions on obviation are found throughout Algonquian (Grafstein 1984, Goddard 1990a, Rhodes 1990a, Bliss 2017)—for instance, within a clause, only one third person argument may be proximate (the highest third person), and within a DP, only one third person nominal may be proximate (the possessor—thus, nouns possessed by third persons are always obviative). However, the difference between Passamaquoddy and the other languages is that, when these restrictions underdetermine proximate-obviative assignment (e.g. in clauses with only one third person argument), the other languages allow the speaker to choose whether to assign proximate or obviative (with concomitant semantic/pragmatic effects), whereas Passamaquoddy forces proximate assignment.

[42]In this particular elicitation, I did not test whether this sentence was ambiguous between Tom leaving or Molly leaving. I suspect that it is, though perhaps with a preference for the null subject to refer back to Tom. The main point is that the verb in the second conjunct cannot be inflected for an obviative subject here, even if that would help reference tracking of null pronouns.

In the next few sections, I will outline the distribution of obviation within the noun phrase, DP OBVIATION (Section 2.5.1), obviation within the clause, CLAUSAL OBVIATION (Section 2.5.2), as well as a preliminary report on obviation across domains (both DP and CP domains), CROSS-DOMAIN OBVIATION (Section 2.5.3), reporting on ongoing collaborative work with Elise Newman (University of Edinburgh), Norvin Richards (MIT), and Giovanni Roversi (MIT).

2.5.1 DP obviation

One of the "two unbreakable rules" of obviation across Algonquian (to use Goddard's 1990a turn of phrase), is that an animate third person possessed by another animate third person must be obviative.[43] We can define a DP obviative rule as follows:

(108) a. **DP obviation** (first pass)
An obviation competitor receives DP obviative if and only if it is c-commanded by another obviation competitor within the same DP. Else, it is proximate.

b. **Obviation competitor**
A nominal[44]is an obviation competitor if and only if it is third person animate.

Under this rule, a possessum which is third person animate will be assigned obviative when it's possessed by a third person animate (under the reasonable assumption that possessors c-command the possessed noun). We can illustrate this below:

(109) SAP possessor: proximate possessum

a. Ckuh-qepu-Ø(*-wol) **n-temis-Ø** pemsokhasik.
to.here-sit$_{AI}$-3(-OBV.SG) **1-dog-PROX.SG** floor
'**My dog$_{PROX}$** sat on the floor.' (GP 2020.11.24;DP)

b. *Ckuh-qepu-Ø(-wol) **n-temis-ol** pemsokhasik.
to.here-sit$_{AI}$-3(-OBV.SG) **1-dog-OBV.SG** floor
Intended: '**My dog$_{OBV}$** sat on the floor.' (GP 2020.11.24;DP)

(110) 3AN possessor: obviative possessum

a. Ckuh-qepu-Ø(-wol) **Laca-Ø** **'-temis-ol** pemsokhasik.
to.here-sit$_{AI}$-3(-OBV.SG) **Roger-PROX.SG** **3-dog-OBV.SG** floor
'**Roger's$_{PROX}$ dog$_{OBV}$** is sitting on the floor.' (GP 2020.12.08;DP)

[43] I'm not sure what happens with inanimate possessors in Passamaquoddy, if those are even possible. Hockett (1966) claims that in Potawatomi, an animate nominal possessed by an inanimate third person does not take obviation marking, comparing *w-nengwign-en* '3-wing-OBV, his wing' to *w-nengwigen* '3-wing, its wing' (Hockett 1966: 64) (note that I've adapted Hockett's orthography to the Wisconsin Native American Languages Project orthography, as used by Lockwood 2017).

[44] Note the deliberate use of the the word "nominal" here, rather than DP or NP. This is because DP possesors need to be able to trigger obviative on NP possessums—this might suggest the need for some kind of feature percolation. I leave this issue aside for future work.

b. *Ckuh-qepu-Ø-Ø **Laca-Ø** **'-temis-Ø** pemsokhasik.
to.here-sit$_{AI}$-3-PROX.SG **Roger-PROX.SG** **3-dog-PROX.SG** floor
Intended: '**Roger's$_{PROX}$ dog$_{PROX}$** is sitting on the floor.' (GP 2020.12.08;DP)

In (109) we see that, with an SAP possessor, a nominal will be proximate (as long as there are no other obviation competitors in the clause to turn it obviative)—we cannot make it obviative. Additionally, it must take proximate peripheral agreement on the verb. In contrast, in (110), we see that a third person animate possessor will force the possessum to be obviative—it's impossible for it to be proximate. Interestingly, in this particular configuration (with an intransitive verb) obviative peripheral agreement is optional.

2.5.2 Clausal obviation

The other unbreakable rule of obviation is that at most one third person argument of a verb can be proximate—all others must be obviative. We can call this restriction on obviation CLAUSAL OBVIATION. Moreover, once we take into account the syntax of the third person inverse, where the internal argument A-moves over the external argument, we can additionally see that it's only the *highest* third person that can be proximate.

In Passamaquoddy specifically, we need to turn 'can' into 'must': the highest third person animate argument in a clause *must* be proximate, and all others must be obviative. Put differently, a third person animate argument c-commanded by another third person animate must be obviative. Under this way of thinking of things, we can define the clausal obviation rule as follows:

(111) a. **Clausal obviation** (first pass)
An obviation competitor receives clausal obviative if and only if it is c-commanded by another obviation competitor within the same clause. Else, it is proximate.

b. **Obviation competitor**
A nominal is an obviation competitor if and only if it is third person animate.

As Privoznov (2020) notes, this rule is strikingly similar to a rule of dependent accusative case (Marantz 1991, Baker 2015, a.o., with precursors in Yip et al. 1987).[45] The only difference is that any DP is a case competitor for dependent case, whereas obviation competitors can only be third person animates.

Let's see how this works. First, let's consider scenarios with only one obviation competitor—intransitives, SAP→3AN, 3AN→SAP, IN→3AN, 3AN→IN: in these cases, the obviation competitor must be proximate.

(112) Intransitives: proximate only

a. Nihtaw-intu-Ø-Ø[47] **Laca-Ø**.
know.how-sing$_{AI}$-3-**PROX.SG** **Roger-PROX.SG**
'**Roger$_{PROX}$** sings well.' (GP 2020.11.10lDP)

[45]The similarity between obviative and accusative case was already noted by Bruening (2001b: §2.4.5), who gives an analysis of obviation as a kind of "accusative case" assigned by Agree with *v* (or, more specifically, checked and deleted under agreement with *v*).

b. *Nihtaw-intu-Ø-**wol** **Laca-Ø**.
know.how-sing$_{AI}$-3-**OBV.SG** **Roger-PROX.SG**
Intended: '**Roger$_{OBV}$** sings well.' (GP 2020.11.10;DP)

c. *Nihtaw-intu-Ø-**Ø** **Lacaw-ol**.
know.how-sing$_{AI}$-3-**PROX.SG** **Roger-OBV.SG**
Intended: '**Roger$_{OBV}$** sings well.' (GP 2020.11.10;DP)

d. *Nihtaw-intu-Ø-**wol** **Lacaw-ol**.
know.how-sing$_{AI}$-3-**OBV.SG** **Roger-OBV.SG**
Intended: '**Roger$_{OBV}$** sings well.' (GP 2020.11.10;DP) (Privoznov 2020: 2)

(113) SAP⟶3AN: proximate only

a. Ø-Nomiy-a-n-**Ø** **olomuss-Ø**.
1-see$_{TA}$-3OBJ-1PL-**PROX.SG** **dog-PROX.SG**
'We saw a **dog$_{PROX}$**.' (GP 2020.11.10;DP)

b. *Ø-Nomiy-a-n-**Ø** **olomuss-ol**.
1-see$_{TA}$-3OBJ-1PL-**PROX.SG** **dog-OBV.SG**
Intended: 'We saw a **dog$_{OBV}$**.' (GP 2020.11.10;DP)

c. *Ø-Nomiy-a-nnu-**l** **olomuss-ol**.
1-see$_{TA}$-3OBJ-1PL-**OBV.SG** **dog-OBV.SG**
Intended: 'We saw a **dog$_{OBV}$**.' (GP 2020.11.24;DP) (Privoznov 2020: 3)

(114) 3AN⟶SAP: proximate only

a. Ø-Nomiy-uku-n-**Ø** **olomuss-Ø**.
1-see$_{TA}$-INV-1PL-**PROX.SG** **dog-PROX.SG**
'**A dog$_{PROX}$** saw us.' (GP 2020.11.24;DP)

b. *Ø-Nomiy-uku-n-**Ø** **olomuss-ol**.
1-see$_{TA}$-INV-1PL-**PROX.SG** **dog-OBV.SG**
Intended: '**A dog$_{OBV}$** saw us.' (GP 2020.11.10;DP)

[47]Interestingly, here we're getting an innovative form of the preverb *nihtaw(i)-*, *'taw(i)-* 'know how'. Conservatively, the initial short /i/ in the first syllable should syncopate in this verb form, as there is no person prefix. Thus would result in a word-initial /nt/ cluster, which simplifies to devoiced [t]—thus, we expect something like *'tawintu Laca* 'Roger sings well'. The innovation here is using the prefixed form of the preverb in independent verb forms without person prefixes (i.e. in third person intransitive independent forms). We can see this same innovation with other preverbs, in varying degrees of progress: this is entirely standard with the progressive preverb *(o)toli-*, which in prefixless independent forms is usually now realized *totoli-* (interestingly with the /t/ of the prevocalic allomorph of the person prefixes rebracketed as part of the preverb), though *toli-* is also sometimes heard. I have also noted that the preverb *ahcuwi-*, *'cuwi-* 'have to' occasionally undergoes the same innovation, being realized as *tahcuwi-* in prefixless independent forms (again with the rebracketing of /t/), as in the following example:

(i) Tahcuwi= nekom kakawi= qasku-Ø.
have.to= 3SG fast= run$_{AI}$-3
'Someone has to run fast.' (EM 2022.03.28)

This innovation might be another result of the gradual erosion of the person prefixes.

c. *Ø-Nomiy-uku-nnu-**l** **olomuss-ol**.
1-see$_{\text{TA}}$-INV-1PL-**OBV.SG** **dog-OBV.SG**
Intended: '**A dog$_{\text{OBV}}$** saw us.' (GP 2020.11.24;DP) (Privoznov 2020: 3)

(115) 3AN⟶IN: proximate only

a. Ø-Nomihtu-n **wasis-Ø** wikuwam.
3-see$_{\text{TI}}$-N **child-PROX.SG** house
'**The child$_{\text{PROX}}$** saw the house.' (GP 2020.11.10;DP)

b. *Ø-Nomihtu-n **wasis-ol** wikuwam.
3-see$_{\text{TI}}$-N **child-OBV.SG** house
Intended: '**The child$_{\text{OBV}}$** saw the house.' (GP 2020.11.10;DP) (Privoznov 2020: 3)

(116) IN⟶3AN: proximate only

a. '-Kosinuhka-ku-n **wasis-Ø** mimey.
3-make.sick$_{\text{TA}}$-INV-N **kid-PROX.SG** grease
'The grease makes **the child$_{\text{PROX}}$** sick.' (GP 2020.11.10;DP)

b. *'-Kosinuhka-ku-n **wasis-ol** mimey.
3-make.sick$_{\text{TA}}$-INV-N **kid-OBV.SG** grease
Intended: 'The grease makes **the child$_{\text{OBV}}$** sick.' (GP 2020.11.10;DP)
(Privoznov 2020: 4)

In all these examples, the obviation competitor must be proximate. In the intransitive examples (112), we can see that no combination of obviative verbal agreement and/or obviative nominal marking is acceptable. In the SAP⟶3AN (113) and 3AN⟶SAP (114) examples, the third person argument cannot be marked obviative, no matter whether the verb agrees in obviation with it or not. Finally, in the 3AN⟶IN (115) and IN⟶3AN (116) examples, the animate third person argument cannot be marked obviative.[48] Thus, if there is only one obviation competitor, it will get default proximate. It cannot be obviative.

In contrast, if there are two obviation competitors in the clause (i.e. two third person animate arguments), then the higher one will be assigned proximate, and the lower one obviative. Thus,

[48] Note that in 3AN⟶IN and IN⟶3AN verb forms there is no proximate/obviative agreement with the animate argument, so the verb form is expected to look the same in both the (a) and (b) examples. We can see that there is no proximate/obviative agreement in these verbs forms when we make the animate argument obviative by possession—you can get neither the obviative central suffix *-(o)li* nor the obviative peripheral suffix *-(o)l*:

(i) a. Ma=te Roger '-temis-ol 't-otol-otom-uw-on-Ø musey.
NEG=EMPH Roger 3-dog-OBV.SG 3-PROG-eat$_{\text{TI}}$-NEG-N-IN.SG moosemeat
'Roger's dog$_{\text{OBV}}$ isn't eating the moosemeat.' (EM 2021.10.06)

b. *Ma=te Roger '-temis-ol 't-otol-otom-**oli**-w-on-Ø musey.
NEG=EMPH Roger 3-dog-OBV.SG 3-PROG-eat$_{\text{TI}}$-**OBV**-NEG-N-IN.SG moosemeat
Intended: 'Roger's dog$_{\text{OBV}}$ isn't eating the moosemeat.' (EM 2021.10.06)

c. *Ma=te Roger '-temis-ol 't-otol-otom-uw-on-**ol** musey.
NEG=EMPH Roger 3-dog-OBV.SG 3-PROG-eat$_{\text{TI}}$-NEG-N-**OBV.SG** moosemeat
Intended: 'Roger's dog$_{\text{OBV}}$ isn't eating the moosemeat.' (EM 2021.10.06)

in the third person direct, the external argument must be proximate and the internal argument muts be obviative (117)—no other permutation is possible:

(117) 3AN⟶3AN direct: only PROX⟶OBV possible

a. **Psuwis-Ø** '-kisi= posokapen-a*(-l) **athusossi-yil**.[50]
cat-PROX.SG 3-PFV= scratch$_{\mathrm{TA}}$-3OBJ-OBV.SG **snake-OBV.SG**
'The cat$_{\mathrm{PROX}}$ scratched the snake$_{\mathrm{OBV}}$.' (EM 2023.08.08)

b. ***Psuwis-Ø** '-kisi= posokapen-a(-l) **athusoss-Ø**.
cat-PROX.SG 3-PFV= scratch$_{\mathrm{TA}}$-3OBJ(-OBV.SG) **snake-PROX.SG**
Intended: 'The cat$_{\mathrm{PROX}}$ scratched the snake$_{\mathrm{PROX}}$.' (EM 2023.08.08)

c. ***Psuwis-ol** '-kisi= posokapen-a(-l) **athusossi-yil**.
cat-OBV.SG 3-PFV= scratch$_{\mathrm{TA}}$-3OBJ(-OBV.SG) **snake-OBV.SG**
Intended: 'The cat$_{\mathrm{OBV}}$ scratched the snake$_{\mathrm{OBV}}$.' (EM 2023.08.08)

d. ***Psuwis-ol** '-kisi= posokapen-a(-l) **athusoss-Ø**.
cat-OBV.SG 3-PFV= scratch$_{\mathrm{TA}}$-3OBJ(-OBV.SG) **snake-PROX.SG**
Intended: 'The cat$_{\mathrm{OBV}}$ scratched the snake$_{\mathrm{PROX}}$.' (EM 2023.08.08)
EM: "Sounds more like the snake did something."

In (117a), we see that in the direct we can have a proximate external argument and an obviative internal argument. Additionally, we must have obviative peripheral agreement here—we can't leave out the suffix *-(o)l* 'OBV.SG'. Any other permutation of proximate and obviative assignment is impossible (117b–d), no matter whether you have obviative peripheral agreement or not.

Similarly, in the third person inverse (which involves syntactic inversion), the internal argument must be proximate and the external argument must be obviative (118)—no other option is available:

(118) 3AN⟶3AN inverse: only OBV⟶PROX possible

a. **Athusoss-Ø** '-kisi= posokapen-ku-l **psuwis-ol**.
snake-PROX.SG 3-PFV= scratch$_{\mathrm{TA}}$-INV-OBV.SG **cat-OBV.SG**
'The snake$_{\mathrm{PROX}}$ got scratched by the cat$_{\mathrm{OBV}}$.' (EM 2023.08.08)

b. ***Athusoss-Ø** '-kisi= posokapen-ku-l **psuwis-Ø**.
snake-PROX.SG 3-PFV= scratch$_{\mathrm{TA}}$-INV-OBV.SG **cat-PROX.SG**
Intended: 'The snake$_{\mathrm{PROX}}$ got scratched by the cat$_{\mathrm{PROX}}$.' (EM 2023.08.08)

c. ***Athusossi-yil** '-kisi= posokapen-ku-l **psuwis-ol**.
snake-OBV.SG 3-PFV= scratch$_{\mathrm{TA}}$-INV-OBV.SG **cat-OBV.SG**
Intended: 'The snake$_{\mathrm{OBV}}$ got scratched by the cat$_{\mathrm{OBV}}$.' (EM 2023.08.08)

[50] In the dictionary (Francis and Leavitt 2008) *athusoss* 'snake' is listed ending in a consonant, with obviative *athusossol* 'snake.OBV', as it ends in the diminutive suffix *-oss*. Here, Edwina Mitchell has reanalyzed it as underlyingly ending in the vowel *i*, resulting in obviative *athusossiyil* 'snake.OBV'.

d. *__Athusossi-yil__ ’-kisi= posokapen-ku-l __psuwis-Ø__.
__snake-PROX.SG__ 3-PFV= scratch$_{\text{TA}}$-INV-OBV.SG __cat-PROX.SG__
Intended: ‘The snake$_{\text{OBV}}$ got scratched by the cat$_{\text{PROX}}$.’ (EM 2023.08.08)

Only (118a) is possible in the inverse, with an obviative external argument and a proximate internal argument. No other arrangement of proximate and obviative assignment (118b–d) is possible here.[51] In each of the grammatical examples, proximate is assigned to the highest obviative competitor in the clause, and obviative is assigned to the lower obviative competitors. This is exactly the correct state of affairs generated by the clausal obviation rule in (111).

We can note that our two obviation rules look suspiciously similar, as both assign obviative to obviation competitors c-commanded by other obviation competitors, and proximate by default:

(119) a. **DP obviation** (first pass)
An obviation competitor receives DP obviative if and only if it is c-commanded by another obviation competitor within the same DP. Else, it is proximate.

b. **Clausal obviation** (first pass)
An obviation competitor receives clausal obviative if and only if it is c-commanded by another obviation competitor within the same clause. Else, it is proximate.

c. **Obviation competitor**
A nominal is an obviation competitor if and only if it is third person animate.

We can thus combine these two rules into one generalized obviation rule, as follows:

(120) a. **Generalized obviation** (first pass)
An obviation competitor receives obviative if and only if it is c-commanded by another obviation competitor within the same obviation domain. Else, it is proximate.

b. **Obviation competitor**
A nominal is an obviation competitor if and only if it is third person animate.

c. **Obviation domain**

[51] Just like with the direct, deleting the obviative peripheral suffix doesn’t help matters:

(i) a. *__Athusoss-Ø__ ’-kisi= posokapen-oq __psuwis-ol__.
__snake-PROX.SG__ 3-PFV= scratch$_{\text{TA}}$-INV __cat-OBV.SG__
Intended: ‘The snake$_{\text{PROX}}$ got scratched by the cat$_{\text{OBV}}$.’ (EM 2023.08.08)

b. *__Athusoss-Ø__ ’-kisi= posokapen-oq __psuwis__.
__snake-PROX.SG__ 3-PFV= scratch$_{\text{TA}}$-INV __cat-PROX.SG__
Intended: ‘The snake$_{\text{PROX}}$ got scratched by the cat$_{\text{PROX}}$.’ (EM 2023.08.08)

c. *__Athusossi-yil__ ’-kisi= posokapen-oq __psuwis-ol__.
__snake-OBV.SG__ 3-PFV= scratch$_{\text{TA}}$-INV __cat-OBV.SG__
Intended: ‘The snake$_{\text{OBV}}$ got scratched by the cat$_{\text{OBV}}$.’ (EM 2023.08.08)

d. *__Athusossi-yil__ ’-kisi= posokapen-oq __psuwis__.
__snake-PROX.SG__ 3-PFV= scratch$_{\text{TA}}$-INV __cat-PROX.SG__
Intended: ‘The snake$_{\text{OBV}}$ got scratched by the cat$_{\text{PROX}}$.’ (EM 2023.08.08)

A constituent is an obviation domain if and only if it is a DP or a clause.

This looks like a kind of dependent accusative case relativized to third person animates that applies both within the clausal as well as nominal domain. If the dependent case parallel is real, then this looks like a counterexample to Baker's (2015: §4.4.3) observation that dependent accusative case doesn't seem to be found within the nominal domain, but I don't explore this consequence further here.

Note that, under this analysis, proximate and obviative assignment is causally dependent on the syntax (e.g. the (third person) direct-inverse alternation), whereas typically people describe the (third person) direct-inverse alternation as being causally dependent on proximate and obviative assignment, both in the descriptive as well as theoretical literature. For instance, in discussing the choice of the "direct" *-aa* '3OBJ' or inverse *-igo* 'INV' in Southwestern Ojibwe, Nichols writes (italics mine): "In the directional set [PG: *-aa* or *-igo*], the theme sign is selected *according to the relative ranks of the participants on a scale of relative distance*...From the least distant to the most distant, the participants are <u>local</u> (first and second persons between which there is no ranking relationship); indefinite (X); animate third person proximate (3, 3p); animate obviative (3′); further obviative (3″), a category introduced only to account for certain obviative on obviative forms and having no other significance); and inanimate (0)" (Nichols 1980: 165). Similarly, in the theoretical literature, several analyses of the (third-person) direct-inverse contrast require the proximate/obviative status of arguments to be pre-assigned: for instance, a common analytic approach (taken by Lochbihler 2012, Oxford 2019b, Hammerly 2020, 2021, a.o.) is to take proximate/obviative features to already be distributed in the input to the syntax (e.g. in the Numeration), and to derive direct/inverse alternations by having the relevant probe *prefer* agreeing with proximates.

The reverse directionality I adopt here—syntactic inversion feeds obviative marking—is not novel: for instance, Rhodes (1976) already argues that direct/inverse marking doesn't causally depend on obviation (italics mine): "If any clause containing a logically animate subject and a logically animate object, both third persons, passive [PG: inverse] is governed by discourse conditions *regardless of the obviation of the terms*" (Rhodes 1976: 113). We can most clearly see this in sentences with two obviative arguments (e.g. because they're both possessed by third persons)—we still get a direct/inverse contrast, as illustrated by (73), repeated below:

(121) a. Raca '-temis-` 't-iyali= nuhsuhkuw-**a**-wa-l Koles '-posu-m-ol.
Roger 3-dog-OBV.PL 3-around= chase$_{\text{TA}}$-**3OBJ**-PL-OBV.SG Grace 3-cat-POSS-OBV.SG
'Roger's dogs$_{\text{OBV}}$ chased around Grace's cat$_{\text{OBV}}$.' (GP 2023.04.04)

b. Koles '-posu-m-ol 't-iyali= nuhsuhka-**ku**-` Raca '-temis-`.
Grace 3-cat-POSS-OBV.SG 3-around= chase$_{\text{TA}}$-**INV**-OBV.PL Roger 3-dog-OBV.PL
'Grace's cat$_{\text{OBV}}$ was chased around by Roger's dogs$_{\text{OBV}}$.' (GP 2023.04.04)

Thus, the direct/inverse contrast cannot be dependent on proximate and obviative assignment (note that we can't appeal to an *ad hoc* "further obviative" category to derive these alternations; Wolfart 1978, Oxford 2017b: §3.7).

However, as you may already see from (121), our clausal obviation rule needs a revision. This is because the possessor of the lower argument in these sentences—*Koles* 'Grace' in (121a) and

Raca 'Roger' in (121b)—is c-commanded by the higher third person argument. So it should be getting obviative, given our generalized obviation rule. More examples of possessors not becoming obviative under influence of higher third person animates are given below:

(122) a. **Gracie-Ø** 't-otoli= supuwah-a-l [**Natasha-Ø** '-posu-m-ol].
Gracie-PROX.SG 3-PROG= pet$_{\text{TA}}$-3OBJ-OBV.SG **Natasha-PROX.SG** 3-cat-POSS-OBV.SG
'**Gracie**$_{\textbf{PROX}}$ is petting [**Natasha's**$_{\textbf{OBV}}$ cat$_{\text{OBV}}$].' (GP 2022.11.02)

b. '-Totol-ahsom-a-wa-l [**Roger-Ø** '-temis-ol].
3-PROG-feed$_{\text{TA}}$-3OBJ-PL-OBV.SG **Roger-PROX.SG** 3-dog-OBV.SG
'**They**$_{\textbf{PROX}}$ are feeding [**Roger's**$_{\textbf{PROX}}$ dog$_{\text{OBV}}$].' (GP, MA 2022.11.30)

How is the lower possessor able to be proximate here?[52]

One way of looking at this is to say that possessors can be "shielded" from participating in clausal obviation by virtue of being inside a different obviation domain, the DP. The benefit of making this kind of generalization is that it allows us to unify "possessor shielding" with the fact that obviation usually doesn't occur cross-clausally, as we can see in the following examples:[53]

(123) a. [En ci 'sami= mahqani-hpuksi-t **sukolopan-Ø**], nit=te
whenever too.much= syrup-taste$_{\text{AI}}$-3CJ **cake-PROX.SG** then=EMPH
Mali-Ø '-putewe-molsi-n.
Mary-PROX.SG 3-blow$_{\text{AI}}$-feel$_{\text{AI}}$-N
'[Whenever **cake**$_{\textbf{PROX}}$ is too sweet], **Mary**$_{\textbf{PROX}}$ feels bloated.' (EM, RP 2022.07.18)

b. **Taniya-Ø** '-kocicihtu-n [eli **olomuss-Ø** wihqat-ahya-t].
Tanya-PROX.SG 3-know$_{\text{TI}}$-N IC.C **dog-PROX.SG** like-play$_{\text{AI}}$-3CJ
'**Tanya**$_{\textbf{PROX}}$ knows [that **the dog**$_{\textbf{PROX}}$ likes to play].' (EM 2022.12.21)

In these sentences, a matrix proximate is happily able to coexist with an embedded proximate—the obviation rule is blocked from applying across these clause boundaries. This is true across adjunct clause boundaries (123a) as well as across complement clause boundaries (123b).

The last kind of obviation blocking context we'll examine are PPs: PP boundaries allow the object of a preposition to be proximate even if there's already a proximate in the matrix clause:

[52] Generally in this kind of context, as seen above, possessors of objects are proximate even if the external argument is already proximate. However, they can also sometimes be obviative—I discuss this and related patterns in Section 2.5.3.

[53] It is possible sometimes for obviation to be assigned cross-clausally; I discuss this in Section 2.5.3.

(124) a. Koti= qasku-Ø **Kirk Francis-Ø** ['ciw **sakom-Ø**].
going.to= run$_{AI}$-3 **Kirk Francis-PROX.SG** for **chief-PROX.SG**
'**Kirk Francis**$_{PROX}$ is going to run [for **chief**$_{PROX}$].' (EM 2022.08.15)

b. **Koluskap-Ø** neke wiku-Ø-ss monihku-k [wiciw **ktanaqsu-wok** **skicinu-wok**].
Koluskap-PROX.SG then.ABSN live$_{AI}$-3-DUB island-LOC with **many-PROX.PL** **Indian-PROX.PL**
'Long ago, **Koluskap**$_{PROX}$ lived on an island [with **many people**$_{PROX}$].'
https://pmportal.org/dictionary/weyossisuwiwisu

Here, the PP boundary shields the object of the preposition from becoming obviative under the influence of the matrix obviation competitor.[54]

Thus, we need to add some sort of locality restriction on the obviation rule, in order to rule out obviation (in the basic case) from crossing clause, PP, and DP boundaries. These domains have all be argued to be *phases* (Chomsky 2000, 2001, Citko 2014, a.m.o)—thus, we can say that the obviation rule cannot cross phase boundaries (again, parallel to what Baker 2015 argues for dependent case in several languages):

(125) a. **Generalized obviation** (final)

An obviation competitor O receives obviative if and only if it is c-commanded by another obviation competitor P within the same obviation domain and there isn't a phase boundary separating O and P. Else, it is proximate.

b. **Obviation competitor**

A nominal is an obviation competitor if and only if it is third person animate.

c. **Obviation domain**

A constituent is an obviation domain if and only if it is a DP or a clause.

It could be the case that obviation domains are also coextensive with phases, but I don't explore this possibility in depth here. One might also wonder whether VP phase boundaries block obviation—shouldn't there be a VP phase boundary between external and internal arguments, thus blocking subject-object obviation, counter to fact? Here are two possible responses to this. The first is that all objects actually evacuate the VP phase in Passamaquoddy (something I independently propose in Chapter 10 in order to capture variation in peripheral agreement between Passamaquoddy, Ojibwe, and Wampanoag), and thus all arguments of the verb will end up in the higher CP phase, able to participate in the obviation rule with each other. The second alternative is to deny the existence of VP phases (Keine 2017, 2020a, 2020b, Mendes and Ranero 2021, Keine and Zeijlstra 2022). I will not adjudicate between these two options (though the first option is more in line with what I will eventually posit in this thesis).

[54] Again, this is not always the case, as I'll discuss in Section 2.5.3

2.5.3 Cross-domain obviation

Phase theory offers an escape hatch to circumvent phase boundaries: the phase edge. Can we find any evidence of this in the domain of obviation? This section suggests that the answer is yes, and tentatively proposes that various exceptional instances of cross-domain obviation (i.e. obviation that seems to cross a phase boundary) involve (potentially covert) movement to the phase edge, placing a lower obviation competitor within range of a higher obviation competitor (see also Grafstein 1984: §4.3 and Rhodes 1990a, 1994 on similar data in Ojibwe, and Dryer 1997 on similar data in the unrelated Ktunaxa).

We begin by first noting that occasionally we can get obviation crossing clause, PP, and DP boundaries (though this is a less common option):

(126) Cross-clausal obviation

a. Kisi= eksku-Ø **Tiger-Ø** [$_{CP}$ 'sami **Piyel-ol**
PFV= sneeze$_{AI}$-3 **Tiger-PROX.SG** because **Peter-OBV.SG**
assoki-mahsu-Ø-wol].
strange-smell$_{AI}$-3-OBV.SG
'**Tiger$_{PROX}$** sneezed [because **Peter$_{OBV}$** smelled funny].' (GP, MA 2023.01.31;EN)

b. Litahasu-Ø **Cora-Ø** [$_{CP}$ **cihkonaqc-ol** '-sikte-hpawol-oku-n atomupil].
think$_{AI}$-3 **Cora-PROX.SG** **turtle-OBV.SG** 3-very-scare$_{TA}$-INV-N car
'**Cora$_{PROX}$** thinks [that the car scared **the turtle$_{OBV}$**].' (GP 2023.01.30;GR)

(127) Cross-PP obviation

a. **N-muhsums-Ø** nt-akonutom-a-ku-n-ol atkuhkakon-ol [$_{PP}$ 'ciw
1-grandfather-PROX.SG 1-tell.story$_{TI}$-APPL-INV-N-IN.PL legend-IN.PL about
motewolonu-`].
motewolon-OBV.PL
'**My grandfather$_{PROX}$** told me stories [about **the motewolons$_{OBV}$**].' (GP, MA 2022.11.30)

b. …kuhus-is-ol =op Ø-miluwa-n-ol [$_{PP}$ 'ciw **nisu-`** **wapi=**
cow-DIM-OBV.SG =CF 3-give.away$_{AI+O}$-N-OBV.SG for **two-OBV.PL** **white=**
kilahq-`].
goose-OBV.SG
'…and **he$_{PROX}$** would give a calf [for **two geese$_{OBV}$**].' (Teeter and LeSourd 2007: 190)

(128) Cross-DP obviation

a. Ø-Nomiy-a-l **Mali-Ø** [$_{DP}$ **Racaw-ol** ’-tus-ol].
3-see$_{TA}$-3OBJ-OBV.SG **Mary-PROX.SG** **Roger-OBV.SG** 3-daughter-OBV.SG
‘**Mary$_{\text{PROX}}$** saw [**Roger’s$_{\text{OBV}}$** daughter$_{\text{OBV}}$].’ (GP 2020.12.08;DP)

b. **Raca-Ø** **’-temis-`** ‘t-iyali= nuhsuhkuw-a-wa-l
Roger-PROX.SG **3-dog-OBV.PL** 3-around= chase$_{TA}$-3OBJ-PL-OBV.SG
[$_{DP}$ **Koles-ol** ’-posu-m-ol].
Grace-OBV.SG 3-cat-POSS-OBV.SG
‘**Roger’s$_{\text{PROX}}$** **dogs$_{\text{OBV}}$** chased around [**Grace’s$_{\text{OBV}}$** cat$_{\text{OBV}}$].’ (GP 2023.04.04)

In all these examples, an obviation competitor is becoming obviative under the influence of an obviation competitor in the next phase up. How should we capture this data?

I tentatively suggest that cross-domain obviation is derived by the relevant DP moving to the edge of the lower phase, potentially covertly. One reason I think this is because, at least in certain cases, there seems to be a word order effect with cross-clausal obviation: only DPs at the left edge of the clause can be assigned obviative cross-clausally:

(129) Cross-clausal obviation: impossible with noninitial/postverbal DPs (sometimes)

a. *Kisi= eksku-Ø **Tiger-Ø** [$_{CP}$ ’sami assoki-mahsu-Ø-wol
PFV= sneeze$_{AI}$-3 **Tiger-PROX.SG** because strange-smell$_{AI}$-3-OBV.SG
Piyel-ol].
Peter-OBV.SG
Intended: ‘**Tiger$_{\text{PROX}}$** sneezed [because **Peter$_{\text{OBV}}$** smelled funny].’ (GP, MA 2023.01.31;EN)

b. *Litahasu-Ø **Cora-Ø** [$_{CP}$ ’-sikte-hpawol-oku-n atomupil **cihkonaqc-ol**].
think$_{AI}$-3 **Cora-PROX.SG** 3-very-scare$_{TA}$-INV-N car **turtle-OBV.SG**
Intended: ‘**Cora$_{\text{PROX}}$** thinks [that the car scared **the turtle$_{\text{OBV}}$**].’ (GP 2023.01.30;GR)

These sentences minimally contrast with (126), where the lower obviation competitor was at the left edge of the clause, suggesting that only a left-peripheral position in the embedded clause allows for cross-clausal obviation.

The second reason to think this is that occasionally speakers will judge that a cross-clausally obviated DP is something like an aboutness topic:

(130) **Cora-Ø** litahasu-Ø [$_{CP}$ **Piyel-ol** ’-kis-onuhm-on kin-kihqah-k
Cora-PROX.SG think$_{AI}$-3 **Peter-OBV.SG** 3-PFV-buy$_{TI}$-N IC.big-be.size$_{II}$-CJ
wikuwam].
house
‘**Cora$_{\text{PROX}}$** thinks [**Peter$_{\text{OBV}}$** bought a big house].’ (GP 2023.02.01;GR)
GP: “I would’ve said *Piyelol*, ’cause I’m talking about him.’

Here, the speaker’s comment suggests that if they make *Piyel* obviative, it makes it sound like the sentence is *about* Peter. This is suggestive evidence that something like topic movement to the left periphery feeds cross-clausal obviation, again lending support to the idea that cross-domain obviation is only possible at phase edges.

It's also worth noting that cross-domain obviation still obeys c-command. So, for instance, a proximate inside an adjunct clause cannot cause a matrix subject to become obviative:

(131) a. [$_{CP}$ Peci-ya-t **Taniya-Ø**], nit=te=na Ø-mace-kila-n
ic.come-go$_{AI}$-3cj **Tanya-prox.sg** then=emph=add 3-start-bark$_{AI}$-n
olomuss-Ø].
dog-prox.sg
'[When **Tanya**$_{\text{PROX}}$ arrived], **the dog**$_{\text{PROX}}$ started barking.' (GP, MA 2022.12.14)

b. *[$_{CP}$ Peci-ya-t **Taniya-Ø**], nit=te=na Ø-mace-kila-li-n
ic.come-go$_{AI}$-3cj **Tanya-prox.sg** then=emph=add 3-start-bark$_{AI}$-obv-n
olomuss-ol].
dog-obv.sg
Intended: '[When **Tanya**$_{\text{PROX}}$ arrived], **the dog**$_{\text{OBV}}$ started barking.' (GP, MA 2022.12.14)

In (131a), we see that it's fine for *Taniya* 'Tanya' in the adjunct clause and *olomuss* 'dog' in the matrix clause to be proximate. However, it's not possible for *Taniya* to be proximate and *olomuss* to be obviative (131b)—this is presumably because *Taniya* doesn't c-command *olomuss* and thus cannot cause it to become obviative.

However, there are a number of remaining issues that need to be dealt with before this can be a complete analysis. The first is when covert movement does or does not allow for cross-domain obviation. With the sentences in (126) and (129), it seems like only overt movement can feed cross-domain obviation. However, if we accept this analysis, we have to accept that in some cases covert movement can do this too, as in (127), as well as the examples below:

(132) Covert movement feeding cross-CP obviation?

a. Cu **Tiger-Ø** eksku-Ø [$_{CP}$ eksqi-li-t **Piyel-ol**].
surely **Tiger-prox.sg** sneeze$_{AI}$-3 sneeze$_{AI}$-obv-3cj **Peter-obv.sg**
'**Tiger**$_{\text{PROX}}$ will sneeze [if **Peter**$_{\text{OBV}}$ sneezes].' (GP, MA 2023.02.01;EN)

b. **Piyel-Ø** '-kocicihtu-n [$_{CP}$ eli kci= wewis-oski-li-t **psuwis-ol**].
Peter-prox.sg 3-know$_{TI}$-n ic.C great= nosy-behave$_{AI}$-obv-3cj **cat-obv.sg**
'**Peter**$_{\text{PROX}}$ knows [that **the cat**$_{\text{OBV}}$ is very nosy].' (GP 2023.01.24)

It's not yet clear when covert movement is able to feed cross-domain obviation and when it isn't.

There's also variation in the availability of cross-clausal obviation in different clause types. For instance, obviation is much more restricted into 'because' clauses than temporal adjuncts.

(133) Cross-clausal obviation into *'sami* 'because' clauses versus temporal adjuncts

a. ***Tiger-Ø** etuci= eksqi-t [$_{CP}$ 'sami **Piyel-ol** n-kis-pekehl-oq].
Tiger-prox.sg ic.much= sneeze$_{AI}$-3cj because **Peter-obv.sg** 1-pfv-spray$_{TA}$-inv
Intended: '**Tiger**$_{\text{PROX}}$ sneezed [because **Peter**$_{\text{OBV}}$ sprayed me].' (GP, MA 2023.01.31;EN)

b. Cu mitsu-Ø **Tiger-Ø** [$_{CP}$ **Mehq-ihtuwa-li-c-il**
surely eat$_{AI}$-3 **Tiger-prox.sg** **ic.red-have.beard$_{AI}$-obv-3cj-obv.sg**
ehq-iluwehehtuw-i-nokot].
ic.stop-be.mad.at$_{TA}$-1obv-3:1pl.cj
'**Tiger$_{PROX}$** will eat [after **Norvin$_{OBV}$** stops being mad at us].' (GP, MA 2023.02.01;EN)

In (133a), we see that we can't get cross-clausal obviation on the external argument of 3⟶SAP *'sami* 'because' clauses, but in (133b) we see that this is possible in temporal adjuncts.

There is also variation in the availability of cross-clausal obviation across different permutations of arguments in the lower clause, even keeping the clause type the same. For instance, in temporal adjuncts, it seems that it's possible to get obviative on the third person in 3⟶SAP scenarios but not SAP⟶3 scenarios, even ensuring that the third person is at the left edge of the lower clause:

(134) a. Cu mitsu-Ø **Tiger-Ø** [$_{CP}$ **Mehq-ihtuwa-li-c-il**
surely eat$_{AI}$-3 **Tiger-prox.sg** **ic.red-have.beard$_{AI}$-obv-3cj-obv.sg**
ehq-iluwehehtuw-i-nokot].
ic.stop-be.mad.at$_{TA}$-1obv-3:1pl.cj
'**Tiger$_{PROX}$** will eat [after **Norvin$_{OBV}$** stops being mad at us].' (GP, MA 2023.02.01;EN)

b. *Nit=te etol-oqsi-t **Mehqi-htuwa-t** [$_{CP}$ **mus-ol**
there=emph ic.there-sleep$_{AI}$-3cj **ic.red-have.beard$_{AI}$-3cj** **moose-obv.sg**
etol-askuwy-ukot].
ic.prog-wait.for$_{TA}$-1pl:3cj
Intended: '**Norvin$_{PROX}$** fell asleep [while we were waiting for **the moose$_{OBV}$**].' (GP, MA 2023.03.07;EN)

There is thus a complex interplay between clause type (different kinds of adjuncts, different kinds of complements) and the internal syntax of the clause that allows for/prevents cross-clausal obviation. Much more work has to be done to fully understand these interactions.

Finally, there's also variation across speakers, as illustrated below:

(135) %**Cora-Ø** litahasu-Ø [$_{CP}$ **Piyel-ol** '-kis-onuhm-on kin-kihqah-k
Cora-prox.sg think$_{AI}$-3 **Peter-obv.sg** 3-pfv-buy$_{TI}$-n ic.big-be.size$_{II}$-cj
wikuwam].
house
'**Cora$_{PROX}$** thinks [**Peter$_{OBV}$** bought a big house].' (✓GP, *MA 2023.02.01;GR)
GP: "I would've said *Piyelol*, 'cause I'm talking about him.'
MA: "*Piyelol* bugs me."

Here, we have a 3an⟶in clause embedded under *litahasu* 'think'. For one speaker (Grace Paul), this configuration allows the embedded subject to receive cross-clauses obviation (with a concomitant information-structural effect), but for another (Margaret Apt), this is impossible.

For all of these reasons, while our final obviation rule (125) that's subject to phase-based locality covers all the basic obviation properties and even allows for certain instances of cross-domain obviation to be feed by movement to phase edges, what I've presented here cannot be a full analysis. As we've seen, there are a number of interesting and intricate complications to untangle and understand before we have a full empirical picture and can fully evaluate the proposed analysis of obviation in Passamaquoddy. However, I will be assuming the obviation rule in (125) throughout this thesis, as I think it captures enough of the data and makes use of remarkably similar syntactic mechanisms to those found elsewhere in the literature (e.g. Baker's 2015 dependent accusative).

Part I

CP and clause size

Chapter 3

Introduction

This part of the thesis explores the syntax of the CP layer in Passamaquoddy by tackling the issue of clause typing: how can we theoretically understand the distribution of independent, conjunct, and subordinative clauses? I address the following core questions:

- What syntactic and/or semantic contexts trigger the use of independent, conjunct, and subordinative clauses?
- What are the various morphosyntactic differences between each clause type derivative of?
- What is the structure of the left periphery in Passamaquoddy, and does it vary across clause type (and if so, how)?
- How do we connect each clause type's morphosyntactic properties to their distribution?

A key conclusion that comes out of the investigation is that different clause types in Passamaquoddy systematically differ in their *structural size*: independent and conjunct clauses contain CP layers whereas subordinative clauses lack them, being bare TPs. Additionally, I show that conjunct clauses come in different sizes, some being a larger, phasal CP and others being a smaller, non-phasal CP. These clause size differences naturally extend to explanations of the distribution of independent, conjunct, subordinative clauses in complementation and coordination structures, given Wurmbrand and Lohninger's (2023) Implicational Complementation Hierarchy, which regulates the minimum size a complement must be in order to be embedded under different classes of attitude predicates, as well as Bjorkman's (2012, 2013) proposal that asymmetric coordination (coordinations where the second conjunct causally and/or temporally follows from the first) involves coordinating TPs rather than CPs. This analysis also allows us to understand certain morphological differences between each clause type, such as why the independent and conjunct both have peripheral suffixes but the subordinative does not. A consequence of this is further justification for the idea that morphological structure originates from syntactic structure, reflecting the presence or absence of particular heads in the syntax.

This kind of size-based analysis is a novel approach to the syntax of clause type in Algonquian languages. Most previous generative literature on clause typing in Algonquian focuses on understanding how the morphology of clause typing connects to its internal syntax, with a core focus being when and how high the verb moves within which clause. One of the main main empirical focuses of this literature are the striking morphological differences between the independent and conjunct, found throughout the family (recall that the subordinative is an Eastern innovation), and most accounts seek to derive these differences from how high the verb moves in each clause type: some propose that the verb moves to C in the independent but not the conjunct (Halle and Marantz 1993, Richards 2004, Hammerly 2020, 2021, Bogomolets et al. 2023), whereas others propose that the verb moves to C in the conjunct but not the independent (Campana 1996, Brittain 1997, 2001, Branigan 2023). Others, in contrast, argue that the verb stays relatively low in both clause types (Bruening 2001b, 2019, Lochbihler and Mathieu 2013, 2016, Johnson 2016, Johnson and Rosen 2016). Of course, there are other analyses of the difference between independent and conjunct out there: for instance, Lochbihler and Mathieu (2013, 2016) argue for Ojibwe that C in the independent contains φ features, whereas C in the conjunct contains δ (discourse) features, and Cook (2014) argues for Plains Cree that there's a *semantic* difference between independent and conjunct, with independent clauses being anchored to the speaker ("indexical") and conjunct clauses being anchored to some other discourse context ("anaphoric"). My proposals and analysis in this thesis don't have much to bear on head-movement accounts of the *internal* syntax of different clause types, and in principle everything that I present here should be compatible with wherever one might want to move the verb in whichever clause type.

The subordinative has also not received much attention in the literature, likely in large part due to the fact that most of the Algonquian literature focuses on the more widely-spoken Central languages (especially Ojibwe and Cree-Innu), which lack the subordinative[1]. The exceptions to this include Goddard (1967: 80, 1974: 320, 1980: 153, 1983, 2020: 108–110) and Quinn (2004, 2007). Goddard's focus is the diachrony of the subordinative in Eastern Algonquian, and he proposes that it developed from verb forms that show agreement with a oblique argument (Goddard 1983: §2), and Quinn (2007) takes up this diachronic proposal as a synchronic analysis of the subordinative, proposing that subordinative verbs shows agreement with a null embedded "event argument" which is bound by the matrix event argument. While Goddard's diachronic proposal may well be correct (I suspect it is), I'm not sure how well it translates into a synchronic analysis like that proposed by Quinn (2007)—in particular, Quinn doesn't clearly spell out a number of features of his account, including what the syntactic properties of this event argument is, where in the clause it sits, what its semantic properties are, how it gets bound and restrictions on its binding, etc., making it difficult to fully evaluate his proposal. Here, I take a different approach, examining a wide range of data that (I think) naturally lead to the conclusion that subordinatives are bare TPs. In fact, this conclusion can be seen as a formalization of Quinn's (2004) earlier "pre-formal" (to quote him) idea that subordinatives involve "clause-level reanalysis".

While I focus specifically on Passamaquoddy and providing an explanatory account of a number of properties of clause typing in the language, with consequences for the analysis of similar clause type differences in other Algonquian languages, there are a number of broader connections and theoretical impacts that come out of the investigation. I make a contribution to literature on clause size, restructuring, and clausal reduction, both in the domain of complementation as well as coordination (which are typically not studied together), as well as a contribution to the literature on the syntax and semantics of clausal complementation and coordination. I also address a

[1]Though see Macaulay (2003) and Johnson and Rosen (2016), who discuss the NEGATIVE MODE in Menominee, which shows the same kind of morphology as the Eastern subordinative but a strikingly distinct distribution (appearing only in negative clauses), likely a parallel but separate morphological development (Goddard 1983).

number of issues related to the syntactic properties of the left periphery and its connection to Ā phenomena, such as the (non)phasal status of different CP layers.

The plan for Part I is as follows:

- **Chapter 4** provides a primarily descriptive survey of the morphological and distributional properties of independent, conjunct, and subordinative clauses in Passamaquoddy, though I point out points of relevance for theoretical work. An important novel outcome of this chapter is a comprehensive overview of the syntactic and semantic contexts that license independent, conjunct, and subordinative clauses, something which does not yet exist in the literature in this amount of depth. The quick summary is as follows: the independent is the default large clause type, the conjunct appears in (most) Ā contexts, in large clauses introduced by complementizers (taking initial change and the element *eli* to be complementizers), and in conditional antecedents, and the subordinative appears in structurally-reduced clauses, optionally in clauses modified by temporal adjuncts or conditional antecedents, and with certain temporal particles (*tane(hk)* 'since', *pihce* 'for a long time').

- **Chapter 5** closely investigates various kinds of Ā phenomena both within and across independent, conjunct, and subordinative clauses, with a primary focus on *wh* movement and long-distance agreement. Once we establish that CP is a crucial driver and landing site for Ā movement in Passamaquoddy, this allows us to diagnose different sizes of clauses based on how they interact with Ā processes. A core empirical takeaway is that subordinative clauses are remarkably limited in how they can interact with Ā extraction, in contrast to independent and conjunct clauses, in ways that suggest they lack CP layers entirely. I also, for the first time, present a full typology of different long-distance agreement processes in Passamaquoddy (in contrast to Bruening 2001b and LeSourd 2019a who only investigate long-distance agreement into the complement of epistemic attitudes), which reveals finer-grained clause size distinctions: independent and some conjunct clauses are full phasal CPs, other conjunct clauses are reduced non-phasal CPs, and subordinative clauses are TPs.

- **Chapter 6** connects the preceding chapter's findings about clause size to some of the distributional patterns described in Chapter 4—namely, those involving clausal complementation and coordination (I do not give an account of the other kinds of contexts, leaving that as a topic for future research). Building on previous work (namely Wurmbrand and Lohninger 2023 on complementation and Bjorkman 2012, 2013 on coordination), I show how existing accounts of the distribution of different sizes of clauses naturally extend to Passamaquoddy, allowing us to see these apparently idiosyncratic differences between independent, conjunct, and subordinative verbs as instances of broader, more general crosslinguistic trends.

- Finally, **Chapter 7** concludes, summarizing the findings and analysis of Part I, and outlining remaining questions and issues for future work to tackle.

Chapter 4

Basics of clause type in Passamaquoddy

In this chapter, I lay out the morphological and syntactic basics of clause type in Passamaquoddy. This chapter will thus be primarily descriptive, though there will be a bit of theoretically-oriented discussion in sections 4.1 and 4.2.4. The first section goes over the morphology of the independent, conjunct, and subordinative, and I will point out that subordinative clauses systemically lack peripheral agreement (the φ probe in C), which already suggests that they might lack a CP layer—something I'll argue for more extensively in Chapter 5. The second section is essentially purely descriptive, laying out as exhaustively as I can the environments where we can get each different clause type. I hope this section can thus fill in this particular gap in the literature, as there isn't yet an exhaustive overview of when we get each clause type (though see Sherwood 1986, LeSourd 1993, Bruening 2001b, and Francis and Leavitt 2008 for some shorter surveys). As such, this chapter might be less relevant to the reader primarily interested in the theoretical conclusions about clause size. The more theoretically-oriented reader might productively use this chapter more as a reference in case they have any empirical questions later on in the thesis.

4.1 Morphological basics

Independent, conjunct, and subordinative most traditionally are terms for different inflectional paradigms, *à la* Indo-European indicative, subjunctive, and infinitive. To better understand how I use these terms in this thesis, let's first consider what a conservative Algonquianist division of inflectional paradigms might look like (e.g. Goddard 1983, Sherwood 1986, Leavitt 1996, a.o.):

(136)

Order	**(Sub)mode**
Independent	Indicative
	Subordinative
Conjunct	Unchanged
	Changed
	Injunctive
Imperative	

Under this categorization, there are six total inflectional paradigms (ignoring negation and tense marking), called modes or submodes, which can be split into three larger groupings, called orders. The orders are defined morphologically, by the paradigm of central agreement markers they use: the independent prefix+central suffix combination, the conjunct suffixes, or imperative suffixes. Each submode is defined by the different ways they make use of those central agreement markers. Thus, in total, we have two submodes of the independent order, the independent indicative and the independent subordinative; three submodes of the conjunct order, the unchanged conjunct, the changed conjunct, and the injunctive (third person imperatives); and a single imperative order (second person imperatives).

In this thesis, I slightly abuse this terminology in the following way:

(137)

Order	**(Sub)mode**	**My terminology**
Independent	Indicative	**Independent**
	Subordinative	**Subordinative**
Conjunct	Unchanged	**(Unchanged) conjunct**
	Changed	**(Changed) conjunct**
	Injunctive	**(Third person) imperative**
Imperative		**Imperative**

The most notable aspect of my terminology is that I use the term "independent" purely to refer to what is strictly speaking the *independent indicative*. The main reason for this is the syntactic distribution of the Passamaquoddy independent indicative is quite similar to the syntactic distribution of the independent order in other Algonquian languages, and thus I think it's clearer, at least for comparative purposes, to simply use the term "independent" for the independent indicative. In contrast, I call the independent subordinative just "subordinative", as syntactically it behaves quite differently from the independent (and, in fact, many of the uses of the subordinative in Passamaquoddy correspond to uses of the conjunct in Algonquian languages that lack subordinatives).

I use the term "conjunct" as a cover term for both unchanged and changed conjunct. In contexts where it'll be necessary to distinguish the two, I'll refer to them as unchanged and changed conjunct, respectively. In most cases, however, "conjunct" will essentially just refer to the changed conjunct, which has a much wider distribution than the unchanged conjunct. As we'll see, the unchanged conjunct only appears in conditional antecedents ('if' clauses), and contexts related to that (e.g. 'even if' concessive clauses, complements of *nopal* 'if only, I wish'). Outside of this chapter, it should generally be safe to understand "changed conjunct" whenever I write "conjunct".

I won't discuss the injunctive and imperative in any detail in this thesis. However, when I do have to refer to them, I'll refer to them both simply as "imperatives", as they both are the canonical, basic directive clause types. And, if necessary, I'll refer to the injunctive as a third person imperative.

With this terminological prelude out of the way, we can get into the morphology of the relevant clause types for this thesis: the independent (strictly speaking, the independent indicative), the conjunct (both unchanged and changed), and the subordinative (strictly speaking, the independent subordinative). See also Section 2.2.2 for more details on verbal morphology, especially where each affix sits in the clausal spine. An important fact that comes out here is that both the independent and conjunct can host CP-level morphology—the peripheral suffix—but the subordinative cannot. Already this suggests that the subordinative is reduced in size compared to the independent and conjunct.

4.1.1 Independent

The independent (indicative) is characterized by independent order central agreement (composed of a person prefix, a formative suffix, and a central suffix), the independent order distribution of the inverse, and peripheral suffixes with schwas. I illustrate the basic template in Table 4.1, leaving out negation and tense marking (as well as the plural stem augment found in AI verbs).

Prefix		Stem + theme sign	Formative		Central suffix		Peripheral suffix	
Infl		√+*v*+Voice	Infl		Infl		C	
n(t)-	1		*-(p)*	P	*-Ø*	SG	*-Ø*	PROX.SG, IN.SG
k(t)-	2		*-(ẅ)*	Ẅ	*-(o)n((n)u)*	1PL	*-(o)l*	OBV.SG, IN.PL
'(t)-	3		*-(w)*	W	*-a*	2PL, 3PL	*-(o)k*	PROX.PL
			-(o)n(e)	N			-`	OBV.PL

Table 4.1: Basic independent template

As is evident, the independent features the full array of prefixes and formatives, as well as the independent order central suffixes and peripheral suffixes. I discuss the agreement behavior of the peripheral suffixes in Part II of this thesis. The presence of the peripheral suffixes already indicates that independent clauses must be CP-sized, in order to be large enough to contain them. We will see syntactic evidence for this conclusion in Chapter 5.

The distribution of the formative suffixes (Goddard 2007) in the independent is as follows (see Xu 2022 for cross-Algonquian discussion):

1. **P formative:** all (personful) arguments of the verb are SAPs
   (SAP AI, SAP/X⟶SAP)

2. **Ẅ formative:** the verb is intransitive with a third person subject
   (II and third person AI)

3. **W formative:** the verb is TA and there's a third person argument
   (TA SAP⟷3, 3⟶3)

4. **N formative:** everywhere else
   (AN⟷IN, AI+O and TA+O, AI unspecified subject)

The P formative *-p* is null when word-final; the Ẅ formative *-ẅ* is generally only realized as umlaut on the stem-final vowel (*i*⟶*u*, *a*⟶*e*); and the W formative *-w* is null except when followed by *-a* 'PL'. Throughout this thesis I will generally not segment out and gloss the W and P formatives, though in the few cases where *-p* 'P' happens to be overt (SAP singular forms in the dubitative preterit) I will segment it out and gloss it 'PART' (for "participant"). I usually gloss *-ẅ* as '3', as it only appears in AI third person forms.

The theme sign in the independent has the independent order distribution—that is, we get inverse marking in 3/X⟶SAP, OBV⟶PROX, IN⟶AN, and optionally in OBV⟶OBV, as illustrated in Table 4.2. There is no theme sign with inanimate objects (LeSourd 1995: 116).

A↓O⟶	1	2	3PROX	3OBV	
1	—	*-ol*	*-a*	*-a*	
2	*-i*	—	*-a*	*-a*	
3PROX	*-oku*	*-oku*	—	*-a*	
3OBV	*-oku*	*-oku*	*-oku*	*-oku*	*-a*
IN	*-oku*	*-oku*	*-oku*	*-oku*	
X	*-oke*	*-oke*	*-a*	*-a*	

Table 4.2: Independent theme sign

4.1.2 Conjunct

In contrast to the independent, the conjunct lacks person prefixes and formative suffixes, instead making do with an extensive array of central suffixes. Like the independent, the conjunct also features peripheral suffixes (this time with the vowel *i*, rather than schwa). I illustrate all of this in Table 4.3.

Stem + theme sign √+v+Voice	Central suffix Infl				Peripheral suffix C	
	-(y)(an)	1SG	*-hti-t*	3PL	*-Ø*	PROX.SG, IN.SG
	-on	2SG	*-uk*	1SG:3	*-il*	OBV.SG, IN.PL
	-t/k	3SG	*-ot*	2SG:3	*-ik*	PROX.PL
	-li-t	3OBV	*-ukot*	1PL:3	*-i(hi)*	OBV.PL
	-k	IN.SG	*-ut*	X:3		
	-mo-k	X	*-iht*	INV.3SG		
	-ek, -eq	1PL	*-nokot, -nomok*	3:1PL		
	-oq	21	*-inoq*	3:21		
	-eq	2PL	*-inaq*	3:2PL		

Table 4.3: Basic conjunct template

Note that there are simple central suffixes, indexing the features of only one argument, as well as a number of portmanteau central suffixes, indexing the features of two arguments (the agent and primary object). There are two conjunct simple 1PL suffixes— the standard one is *-ek* (Sherwood 1986, Francis and Leavitt 2008), and *-eq* (homophonous with the simple 2PL suffix) is used by some speakers, like Edwina Mitchell. I list two 3:1PL portmanteaux: *-nokot*, used by our Passamaquoddy consultants, and *-nomok*, used by our Wolastoqey consultants. The paradigms in

Francis and Leavitt (2008) also list a 3:1pl portmanteau *-inomot*, but this doesn't seem to be used by anyone I've worked with. The behavior of the conjunct peripheral suffixes differs from the independent—I discuss conjunct peripheral agreement briefly in Section 10.3.2. However, the presence of peripheral suffixes indicates morphologically, just like with the independent, that conjunct clauses contain CP layers. I provide further syntactic evidence to this effect in Chapter 5.

The conjunct also features different patterning of theme signs, as illustrated in Table 4.4.

A↓O→	1	2	3prox	3obv	
1	—	*-ol*	*(-a)*	*(-a)*	
2	*-i*	—	*(-a)*	*(-a)*	
3prox	*-i*	*-os*	—	*-a*	
3obv	*-i*	*-os*	*(-oku)*	*(-oku)*	*-a*
in	*-i*	*-os*	*(-oku)*	*(-oku)*	
X	*-oke*	*-oke*	*(-a)*	*(-a)*	

Table 4.4: Conjunct theme sign

Inverse marking is reduced in its distribution compared to the independent—it only appears in X→SAP, obv/in→prox, in→obv, and optionally in obv→obv. Notably, inverse marking is lacking in 3/in→SAP scenarios. Note also the allomorph *-os* of the second person theme sign, which appears when followed by third person *-k*. I put parentheses around those theme signs that disappear/are realized as null when there's a following central suffix portmanteau (in particular, *-uk* '1sg:3', *-ot* '2sg:3', *-ukot* '1pl:3', *-ut* 'X:3', and *-iht* 'inv.3sg') or a vowel-initial simple suffix (as *-a* deletes before vowel-initial conjunct central suffixes).

Finally, the conjunct also features a process of initial change, which can affect the vowel in the leftmost syllable of the verbal complex (leftmost initial or preverb). In most cases initial change has no effect—however, if the leftmost vowel is a schwa, then that schwa becomes *e* under initial change. Initial change bleeds syncope and various other phonological processes that occur around initial schwas. I illustrate this below:

(138) a. **pkon** -a -t
pick$_{\text{TA}}$ -3obj -cj
'if she picks her' (unchanged)

b. **mekon** -a -t
ic.pick$_{\text{TA}}$ -3obj -cj
'(that) she picks her' (changed)

The verb stem here is underlyingly |mokon-| 'pick$_{\text{TA}}$'. In the unchanged conjunct (138a), the initial schwa syncopates, feeding devoicing of *m* to *p*, resulting in the stem *pkon-*. In the changed conjunct (138b), the initial schwa changes to *e*, bleeding syncope and devoicing, resulting in the stem *mekon-*. In certain cases, initial change can optionally be realized as a complementizer *eli*. Historically the preverb *(o)li-* 'thus, to there' with initial change), though synchronically *eli* is probably best considered a simple complementizer (perhaps the "free" realization of initial change), following Bruening (2001b: §3.3.2).[1]

[1]Though see LeSourd (2019a: §3.2) for some dissent. I find Bruening's conclusion more convincing, as LeSourd assumes that surface morphological facts about *eli* (i.e. that it bears initial change) directly reveal its syntactic status,

4.1.3 Subordinative

Turning now to the subordinative, we can see that the subordinative essentially uses the same template as the independent, with the same person prefixes, formatives, and central suffixes, except for two differences: it lacks peripheral suffixes entirely, and makes do with only two out of the four formatives, as illustrated in Table 4.5. In a sense, since subordinatives are inflectionally (slightly) impoverished relative to independent and conjunct, they can be considered (slightly) "less finite" than independent and conjunct verbs—and, as we'll see, their syntactic distribution bears a number of similarities with the distribution of nonfinite verb forms in other languages.

Prefix		Stem + theme sign	Obviative supplement		Formative		Central Suffix	
Infl		√+v+Voice	Infl		Infl		Infl	
n(t)-	1		*-(o)li*	OBV	*-(ẅ)*	Ẅ	*-Ø*	SG
k(t)-	2				*-(o)n(e)*	N	*-(o)n(n)(u)*	1PL
'(t)-	3						*-a*	2PL, 3PL

Table 4.5: Basic subordinative template

The fact that subordinatives systematically lack peripheral suffixes can be taken as a simple morphological argument that subordinative clauses lack a CP layer, a claim that I will more systematically justify with syntactic arguments in Section 5.

The distribution of the Ẅ and N formatives is also different from in the independent. The Ẅ formative only appears in II verbs, whereas the N formative appears in every other context. The prefixes and central suffixes also have a slightly wider distribution in the subordinative than in the independent, appearing in third person AI forms, where they are lacking in the independent—in the independent, features of AI third person subjects are instead exponed by the peripheral suffix. We can see this below:

(139) a. acomu **-Ø -wok**
tell.story$_{\text{AI}}$ **-ẅ** -PROX.PL
'they$_{\text{PROX}}$ tell a story' (IND)

b. **'t-** acomi **-ni -ya**
3- tell.story$_{\text{AI}}$ **-N -PL**
'they tell a story' (SUB)

Example (139a) features a 3PL AI independent form, and the features of the subject are realized in the peripheral suffix, and we get the umlauting Ẅ formative (here, realized via changing the final vowel in the stem *acomi-* 'tell a story' to *u*). In contrast, in (139b) we have the corresponding subordinative form, lacking peripheral agreement entirely, exponing the features of the subject with central agreement, and featuring the N formative.

This particular observation can be used as an additional morphological argument for subordinative clauses truly lacking C. This argument is based on Oxford's (2015, 2017a, 2020a) observation that C and Infl show a kind of Kinyalolo's Constraint effect in several Algonquian languages:

something I don't take for granted given the indirect relationship between syntax and morphology. LeSourd's core assumption is that the morphological/prosodic category of "preverb" cannot realize C, and it isn't obvious why that should be. A number of syntactically quite diverse elements—secondary predicates, modifiers, aspect and modal markers, etc.—can all be preverbs. Why not also complementizers? In contrast, Bruening offers syntactic arguments that *eli* is just a complementizer—namely, a lack of island effects and its syntactic distribution.

namely, when C and Infl would both index the same goal, Infl is realized as a the umlauting Ẅ formative and the features of that goal are realized only in C, rather than both Infl and C. He proposes that when C and Infl have agreed with the same goal, you Impoverish the φ features on Infl (similar to the analysis of inverse morphology, Section 2.4.2), and the default exponent of Infl is Ẅ. In Passamaquoddy, we can see this in third person AI forms, as in (139a).

However, we don't get this Kinyalolo's Constraint effect in the subordinative—why? Under Oxford's analysis, this is because the subordinative really lacks peripheral agreement on a deep level. Since there's no peripheral suffix, there can be no C-Infl dissimilation, and thus the subordinative shows full central agreement in third person AI forms. Thus, this apparently idiosyncratic difference between the independent and subordinative is really just a natural consequence of a deeper, more basic syntactic difference: independent clauses have CP layers (and thus a peripheral suffix), whereas subordinative clauses lack CP layers (and thus lack a peripheral suffix).

That subordinative clauses contain structure up to TP can be seen from the fact that they can occasionally bear (what is probably) overt tense marking: the PRETERITE (past tense) marker *-hpon/-(o)pon(i)*:

(140) a. Kamot=op [$_{\text{SUB}}$ skat Ø-nipuwi-w-one-wi-nu-**hpon**].
better=CF NEG 1-be.married$_{\text{AI}}$-NEG-N-NEG-1PL-**PRET**
'We shouldn't have gotten married.'
https://pmportal.org/dictionary/kamot-kamot-op-kamot-te

b. N-pawatom-uw-a-n [$_{\text{SUB}}$ Norvin Ø-mattoktehmuw-a-ne-**hpon**
1-want$_{\text{TI}}$-APPL-3OBJ-N Norvin 3-call$_{\text{TA}}$-3OBJ-N-**PRET**
ihtol-oqs-ulti-mo-k maca-ha-woloti-yek].
IC.HAB.there-sleep$_{\text{AI}}$-PL-X-CJ IC.leave-go$_{\text{AI}}$-PL-1PL.CJ
'I want Norvin to have (already) called the hotel when we leave.' (GP, MA 2023.05.02)

This particular suffix sits in between the central suffix (Infl) and the peripheral suffix (C), and I take it to expone T. While it's not common for an overt exponent of T to appear in subordinative clauses, the fact that it *is* possible in certain contexts signals that subordinative clauses must at least be TP sized.

The distribution of theme signs and inverse marking is exactly the same in subordinative as in the independent, as shown in Table 4.6.

A↓O⟶	1	2	3PROX	3OBV	
1	—	*-ol*	*-a*	*-a*	
2	*-i*	—	*-a*	*-a*	
3PROX	*-oku*	*-oku*	—	*-a*	
3OBV	*-oku*	*-oku*	*-oku*	*-oku*	*-a*
IN	*-oku*	*-oku*	*-oku*	*-oku*	
X	*-oke*	*-oke*	*-a*	*-a*	

Table 4.6: Subordinative theme sign

4.2 Distributional basics

In this section, I describe as exhaustively as I can the distribution of independent, conjunct, and subordinative clauses. As such, this section is primarily descriptive in nature, and those readers who are more interested in the theoretical aspect of this work are encouraged to merely skim this section and use it more as a reference in reading later chapters. The summary is as follows:

1. **Independent contexts:**
   (a) Information-structurally unmarked matrix declaratives
   (b) Matrix polar questions
   (c) Matrix alternative questions
   (d) Certain *wh* questions
   (e) Complement of *itom* 'say' and *litahasu* 'think', occasionally under other typically conjunct-selecting predicates
   (f) Reason clauses with *'sami* 'because' and *ipocol* 'because'
   (g) Concessive clauses with *alu(wehta)* 'although' and *apeq* 'although'

2. **Conjunct contexts:**
   (a) Complement of verbs like *'kocicihtun* 'know', *wewitahatomon* 'remember', *assokitahasu* 'be surprised', *nomihtun* 'see', etc. (changed conjunct)
   (b) Most *wh* questions (changed conjunct)
   (c) Relative clauses (changed conjunct)
   (d) Temporal adjuncts (changed conjunct)
   (e) Focus (optionally) (changed conjunct)
   (f) Clausal standards of comparison (changed conjunct)
   (g) Exclamatives (changed conjunct)
   (h) Purpose clauses (changed conjunct)
   (i) Reason clauses with *eli* 'IC.thus' (changed conjunct)
   (j) Presentatives (changed conjunct)
   (k) Concessive clauses with *cika(w)* 'even though, even if' (changed and unchanged conjunct)
   (l) Conditional antecedents ('if' clauses) (unchanged conjunct)
   (m) Complement of *nopal* 'I wish, if only' (unchanged conjunct)

3. **Subordinative contexts:**
   (a) Complement of verbs like *'pawatomon* 'want', *'kisehtun* 'make' *'kisitahatomon* 'decide', *'tolokimal* 'order', etc., and particles like *kamot* 'it would be better'

(b) Second conjunct of certain coordinations

(c) Narrative sequencing/clause chaining

(d) Conditional consequents (‘then’ clauses) (optionally)

(e) Clause modified by a temporal adjunct (optionally)

(f) ‘Since’ clauses

(g) With *pihce* ‘for a long time’

(h) Polite imperatives

In the sections below, I exemplify and discuss each of these contexts, beginning with the independent, then moving on to the conjunct, then ending with the subordinative. In the remainder of the thesis, I will not provide an analysis of all of these various uses of each different clause types—instead, I will specifically focus on understanding the distribution of each clause type in clausal complementation as well as clausal coordination. However, I will be as exhaustive as possible here to serve as a reference for future work that seeks to understand the fuller picture of why each clause type has the distribution it does.

4.2.1 Independent

Unmarked matrix declaratives

It’s quite reasonable to think of the independent as the most basic, “default” clause type. For instance, it appears in information-structurally unmarked matrix declarative clauses. As such, it is by far the most common clause type one will get in elicitation. As an illustration of this, we can examine broad focus declaratives, which don’t have any kind of topic or focus on any part of the sentence. To elicit these, we can ask for them as answers to ‘what happened?’ questions. When we do this, we invariably get independent answers:

(141) **Q**: Tan l-eyu-Ø?
WH thus-be$_{\text{II}}$-3
‘What happened?’

A: N-itapi-yik ’-kis-onuw-a-wa-\` sukolopanis-\`. IND
1-friend-PROX.PL 3-PFV-buy$_{\text{TA}}$-3OBJ-PL-OBV.PL cookie-OBV.PL
‘My friends bought cookies.’ (GP, MA 2022.07.25)

(142) **Q**: Tan ol-onukot-Ø?
WH thus-happen$_{\text{II}}$-3
‘What’s happening?’

A: Espons ’t-otol-om-a-l pskihqimins-ol. IND
raccoon 3-PROG-eat$_{\text{TA}}$-3OBJ-OBV.SG strawberry-OBV.SG
‘The raccoon is eating a strawberry.’ (EM 2022.10.26;TB)

(143) **Q**: Keq kisi= l-eyu-Ø wolaku?
WH PFV= thus-happen$_{\text{II}}$-3 yesterday
'What happened yesterday?'

A: Kisi= pkon-a piley sakom wolaku. IND
PFV= pick$_{\text{TA}}$-3OBJ new chief yesterday
'A new chief was elected yesterday.' (GP, MA 2023.04.25)

In general, the large majority of matrix clauses will be independent, and any deviations from this seem to mostly have to do with focus and/or *wh* questions, as we'll see.

Matrix polar questions

Matrix polar questions are also generally independent, as we can see in the following examples:

(144) a. Kat not pq-atpe-wi-Ø-hpon kotoke-w l-ikoto-k? IND
NEG that.PROX.SG red-have.hair$_{\text{AI}}$-NEG-3-PRET other-ABSN.IN.SG thus-year.pass$_{\text{II}}$-CJ
'Didn't he have red hair last year?' (GP, RP 2021.02.22)

b. Kis nut-esson-Ø-ul mahsusi-yil? IND
already out-move$_{\text{II}}$-3-IN.PL fiddlehead-IN.PL
'Are the fiddleheads out yet?' (RP 2023.01.21)

c. Kiluwaw Mali '-kisi-y-a-wa opan? IND
2PL Mary 2-PFV-make$_{\text{TA}}$-3OBJ-PL bread
'Did you and Mary make bread?' https://pmportal.org/dictionary/kiluwaw

In these examples, you can note that there is no clear marker of a polar question. In general, the only marker of a polar question is a sharp rise in pitch at the end of the sentence. However, another common way to form a polar question is to add *kosona tan* 'or WH' (or also occasionally *kosona kotama* 'or no' or *kosona keq* 'or what') at the end. The sentence remains independent.

(145) a. Pq-atpe-Ø-hpon Piyel kotoke-w l-ikoto-k, **kosona tan**? IND
red-have.hair$_{\text{AI}}$-3-PRET Peter other-ABSN.IN.SG thus-year.pass$_{\text{II}}$-CJ **or WH**
'Did Peter have red hair last year or not?' (GP, RP 2021.02.22)

b. Kis-esson-Ø yut, **kosona tan**? IND
can-move$_{\text{II}}$-3 this.IN.SG **or WH**
'Does this work or not?' https://pmportal.org/dictionary/kisesson

c. Ya, ma=te nit wen toke 't-uwehka-w-on, **kosona tan**? IND
yeah NEG=EMPH that.IN.SG who now 3-use$_{\text{AI+O}}$-NEG-N **or WH**
'Yeah, no one uses that now, or do they?' https://pmportal.org/dictionary/kosona

Matrix alternative questions

Just like polar questions, alternative questions are also generally independent, only distinguished from declaratives intonationally:

(146) a. Context: I'm asking you to choose between raspberry and strawberry jam.

K-pawatom-on minsoss-ey **kosona** pskihqimins-ey sunap? — IND
2-want$_{TI}$-N raspberry-ADJZ **or** strawberry-ADJZ jam
'Do you want raspberry **or** strawberry jam?' (EM 2023.07.11)

b. Context: I'm wondering which cultural activity you want to participate in.

'-Koti= mahqan-k **kosona** '-kotuw-apskihik? — IND
2-going.to= syrup-make$_{AI}$ **or** 2-going.to-bead$_{AI}$
'Are you going to make maple syrup **or** do beadwork?' (EM 2023.07.11)

c. Context: You're wondering whether the cake is homemade or storebought.

'-Kis-onuw-a-l Mehq-ihtuwa-t sukolopan-ol **kosona** Piyel '-kisi-y-a-l? — IND
3-PFV-buy$_{TA}$-3OBJ-OBV.SG IC.red-have.beard$_{AI}$-3CJ cake-OBV.SG **or** Peter 3-PFV-make$_{TA}$-3OBJ-OBV.SG
'Did Norvin buy the cake **or** did Peter make it?' (EM 2023.07.11)

Certain *wh* questions

Some *wh* questions are typically independent. We get independent with *tama* 'where' and *tayuwe* 'when' questions (147a–b), as well as when questioning the complement of *luhke* 'do, work', *liwisu* 'be named', *itom* 'say', and *litahasu* 'think' (and their derivatives) with *keq(sey)* 'what' (147c–f):

(147) a. **Tama** nt-i? — IND
where 1-be.at$_{AI}$
'**Where** am I?' https://pmportal.org/dictionary/tama

b. **Tayuwe** k-peci-ya-p-s? — IND
when 2-come-go$_{AI}$-PART-DUB
'**When** did you arrive?' https://pmportal.org/dictionary/tayuwe

c. **Keq** kt-otoli= oluhk? — IND
what 2-PROG= do$_{AI}$
'**What** are you doing?' https://pmportal.org/dictionary/luhke

d. **Keq** kt-oli-wis? — IND
what 2-thus-be.named$_{AI}$
'**What** is your name?' https://pmportal.org/dictionary/liwisu

e. **Keq** k-itap itom-Ø? — IND
what 2-friend say$_{AI}$-3
'**What** did your friend say?' https://pmportal.org/dictionary/itom

f.	**Keqsey**	kil	kt-olitahas? IND
	what	2SG	2-think$_{AI}$

‘**What** do you think?’ (GP 2020.10.06;NR)

Additionally, though *tan* ‘how’ questions are typically described as being subordinative (Sherwood 1986: 133–134, LeSourd 1993: 23, Bruening 2001b: 48, Francis and Leavitt 2008: 43), in Chapter 5 I argue that these are actually independent, with the verbal morphology indicating peripheral agreement with the relative root complement, following Goddard (2020). I provide a few examples of this kind of question below:

(148)

a.	**Tan**	wen	’t-ol-aqos-a-n	tumahsis-ol? IND
	WH	who	3-thus-cook$_{TA}$-3OBJ-N	frybread-OBV.SG

‘**How** do you cook frybread?’ https://pmportal.org/dictionary/olaqosal

b.	**Tan**	’t-ol-apita-ha-n	wahkaliqs? IND
	WH	3-thus-tooth-go$_{AI}$-N	wheel

‘**How**’s the tread on the tire?’ https://pmportal.org/dictionary/lapitehe

c.	**Tan**	’-qon-atok-osi-n	was-oss-is? IND
	WH	3-extent-rope-be$_{AI}$-N	kid-DIM-DIM

‘**How** long is the little baby?’ https://pmportal.org/dictionary/qonatokosu-qontoksu

For more details on the distribution of clause types with *wh* questions, see Chapter 5.

Complement of *itom* ‘say’, *litahasu* ‘think’

Independent is what is most common in the complement of the verbs *itom* ‘say’ and *litahasu* ‘think’, as illustrated below:

(149) Independent under *itom* ‘say’

a.	Roger	**itom-Ø**	[$_{IND}$ koti=	peci-ye-Ø	sepawonuk	].
	Roger	**say$_{AI}$-3**	going.to=	come-go$_{AI}$-3	tomorrow	

‘Roger **said** he’s going to come tomorrow.’ (EM 2023.06.13)

b.	Walis	**itom-Ø**,	[$_{IND}$ ’-sesomitahatom-on	keqsey	nit	].
	Wallace	**say$_{AI}$-3**	3-wonder$_{TI}$-N	what	that.IN.SG	

‘Wallace **said** that he didn’t know what that was.’

https://pmportal.org/dictionary/sesomitahatomon

(150) Independent under *litahasu* ‘think’

a.	Cora	**litahasu-Ø**	[$_{IND}$ Ø-nomiy-a-l	Piyel-ol	lamiw	kcihku-k	].
	Cora	**think$_{AI}$-3**	3-see$_{TA}$-3OBJ-OBV.SG	Peter-OBV.SG	in	forest-LOC	

‘Cora **thinks** she saw Peter in the woods.’ (GP, DT 2023.01.25;NR)

b. **Litahasu-Ø** Sapet [$_{\text{IND}}$ ma=te cuwi= wit-okehkim-a-w].
think$_{\text{AI}}$-3 Elizabeth NEG=EMPH must= with-teach$_{\text{TA}}$-3OBJ-NEG
'Elizabeth **thinks** she doesn't have to go to school.'
https://pmportal.org/dictionary/litahasu

Importantly, we know that these are true independent embedded clauses and not quotations because the matrix third person subjects in each of these examples is coreferential with the embedded third person subject—since people don't (usually) talk or think about themselves in third person, these must be instances of indirect speech.

Occasionally we find independent embedded under other verbs, though it's not the most common option. For more details and discussion, see Section 6.1.

Reason clauses with *'sami* and *ipocol*

The particles *'sami* 'because' and *ipocol* 'because' select independent clauses, as illustrated below:

(151) Independent with *'sami* 'because'

a. Mace= mehtolihka-Ø-k pskihqimins-ok [$_{\text{IND}}$ **'sami** mecim-olan-Ø].
start= rot$_{\text{AI}}$-3-PROX.PL strawberry-PROX.PL **because** always-rain$_{\text{II}}$-3
'The strawberries have started to rot **because** it's constantly raining.' (EM 2022.08.01)

b. Tol-otemu-Ø [$_{\text{IND}}$ **'sami** '-koskahl-a-l 't-ahcikone-m-ol].
PROG-cry$_{\text{AI}}$-3 **because** 3-lose$_{\text{TA}}$-3OBJ-OBV.SG 3-apple-POSS-OBV.SG
'He's crying **because** he lost his apple.' https://pmportal.org/dictionary/cikon

(152) Independent with *ipocol* 'because'

a. Skuwim-a-ne Roger, [$_{\text{IND}}$ ma **ipocol** yut ihi-w-Ø].
talk.about$_{\text{TA}}$-3OBJ-21.IMP Roger NEG **because** here be.at$_{\text{AI}}$-NEG-3
'Let's talk about Roger, **since** he's not here.' (EM 2023.01.04)

b. Woli= 'sotuw-a [$_{\text{IND}}$ **ipocol** ma=te sp-atuwe-w-Ø].
good= understand$_{\text{TA}}$-3OBJ **because** NEG=EMPH high-speak$_{\text{AI}}$-NEG-3
'He is easily understood because he speaks in layman's terms.' (lit. '...because he doesn't speak fancily.') https://pmportal.org/dictionary/sotuwa-1

Note that, while *'sami* 'because' appears at the beginning of the reason clause, *ipocol* can either appear in first position or in second position.

Concessive clauses with *alu(wehta)* and *apeq*

The particles *alu*, *aluwehta*, and *apeq* 'although', which introduce concessive clauses, all take independent:

(153) a. [$_{\text{IND}}$ **Aluwehta** Sapet kotuwi-ntu-Ø], kenoq ma=te 'tawi-ntu-Ø.
though Elizabeth want-sing$_{\text{AI}}$-3 but NEG=EMPH know.how-sing$_{\text{AI}}$-3
'**Although** Elizabeth wants to sing, she can't sing well.' (EM 2021.07.22)

b. [$_{\text{IND}}$ **Alu** molihkikone-Ø] ma tahk luta-w-Ø.
though be.strong$_{\text{AI}}$-3 NEG but fight$_{\text{AI}}$-NEG-3
'**Although** he is strong he is reluctant to fight back.'
https://pmportal.org/dictionary/luta

c. [$_{\text{IND}}$ **Apeq** moc-one-Ø], kenuk '-kis-pawol-a-` amkewinu-`.
though bad-have.hand$_{\text{AI}}$-3 but 3-can-bluff$_{\text{TA}}$-3OBJ-OBV.PL player-OBV.PL
'**Even though** he has a bad hand, he can bluff the other players.'
https://pmportal.org/dictionary/mocone

4.2.2 Conjunct

Complement of certain verbs

The complement of verbs like *'kocicihtun* 'know', *wewitahatomon* 'remember', and *unitahasin* 'forget' is typically changed conjunct, as illustrated below:

(154) a. Espons **'-kocicihtu-n** [$_{\text{CJ}}$ eli=hc opos kipi-ya-t].
Racoon **3-know$_{\text{TI}}$-N** IC.C=FUT tree fall-go$_{\text{AI}}$-3CJ
'Raccoon **knows** that the tree will fall.'
https://pmportal.org/dictionary/kocicihtun-kosicihtun

b. Tepit **Ø-wewitahatom-on** [$_{\text{CJ}}$ w-ikuwoss-ol etol-amke-li-t
David **3-remember$_{\text{TI}}$-N** 3-mother-OBV.SG IC.PROG-play$_{\text{AI}}$-OBV-3CJ
altestakoni= amkakon].
dice.dish= game
'David **remembers** his mother playing the dice game.'
https://pmportal.org/dictionary/altestakon

c. **N-kisi= wonitahasi-n** [$_{\text{CJ}}$ eli n-qoss cuwi= sukolopanis-ke-t].
1-PFV= forget$_{\text{AI+O}}$-N IC.C 1-son must= cookie-make$_{\text{AI}}$-3CJ
'I forgot that my son had to make cookies.' (EM 2023.06.13)

Note that these kinds of complements can optionally have initial change realized as the complementizer *eli*, rather than directly on the verbal complex. Occasionally, these verbs can also embed independent.

We also occasionally find conjunct under the verbs *itom* 'say' and *litahasu* 'believe', which typically otherwise take independent complements:

(155) a. Sakom **itom-Ø** [CJ eli skat luk-hoti-mu-h-k tan eci= qsihtasi-k
chief **sayAI-3** IC.C NEG workAI-PL-X-NEG-CJ WH IC.much= observeII-CJ
Wolasuweltomuwi- kisq].
give.thanks= day
'The chief **says**, no work on Thanksgiving Day.'
https://pmportal.org/dictionary/itom

b. Piyel **litahasu-Ø** [CJ nekom nihiht kisi= pkon-a-t
Peter **thinkAI-3** 3SG that.OBV.PL IC.PFV= pickTA-3OBJ-3CJ
minsoss-`].
raspberry-OBV.PL
'Peter **thinks** he picked those raspberries.' (EM 2023.01.22;NR)

In Section 6.1, I argue that all of Wurmbrand and Lohninger's (2023) propositional complement predicates (predicates that express what someone says, thinks, or knows) embed either conjunct or independent. I also suggest that both independent and conjunct are available under these predicates, though different predicates have different gradient preferences.

In addition to these particular verbs, we also get changed conjunct under emotive predicates, like *assokitahasu* 'be surprised' and *palitahasu* 'be proud, happy', as well as under perception verbs, like *nomihtun* 'see' and *nutomon* 'hear':

(156) Conjunct under emotive predicates

a. **Assokitahas-ultu-Ø-wok** [CJ eli olon-atuwa-yin].
be.surprisedAI-PL-3-PROX.PL IC.C normal-speakAI-2SG.CJ
'They're **surprised** that you speak Maliseet.' (lit. '...that you speak the ordinary language.')
https://pmportal.org/dictionary/tawi-olonatuwe

b. **Eci= palitahasi-t** n-qoss [CJ peth-a-t '-cilonasit-om-ol].
IC.much= be.proudAI-3CJ 1-son IC.catchTA-3OBJ-3CJ 3-haddock-POSS-OBV.SG
'My son **was so proud** of catching his haddock.'
https://pmportal.org/dictionary/cilonasit

(157) Conjunct under perception verbs

a. **Ø-Nomihtu-n** [CJ eli wonahluhsuwi-Ø tan etuci= siktehsoni-Ø].
1-seeTI-N IC.C be.forgetfulAI-1SG.CJ WH IC.much= be.tiredAI-1SG.CJ
'I see that I am forgetful when I am tired.'
https://pmportal.org/dictionary/wonahluhsuwiw

b. **Ø-Nutuw-a-`** [CJ mete-nt-ulti-li-t ess-` lampeq].
1-hearTA-3OBJ-OBV.PL IC.heard-singAI-PL-OBV-3CJ clam-OBV.PL underwater
'He **heard** the clams singing underwater.'
https://pmportal.org/dictionary/piscopolal

Note that, again, we can optionally realize initial change on a complementizer *eli*. Interestingly, in the case of perception verbs, this seems to correlate with a change in meaning, with indirect perception using *eli* and direct perception lacking *eli*. For more discussion about which clause types are found under which attitude predicates, see Section 6.1.

Wh questions

All other *wh* questions, besides the ones that take independent discussed above, are changed conjunct. This includes *wen* ‘who’ and *keq* ‘what’ questions, as well as *(keq) mehsi*/*keq weci* ‘why’, *tan* ‘where’, and *tan yut* ‘which’ questions:

(158) a. **Wen** keti= enawke-t? CJ
who IC.want= race$_{AI}$-3CJ
‘Who wants to race?’ https://pmportal.org/dictionary/enawke

b. **Keq** Roger kis-som-a-t ’-temis-`? CJ
what Roger IC.PFV-feed$_{TA}$-3OBJ-3CJ 3-dog-OBV.PL
‘**What** did Roger feed his dogs?’ (EM 2023.02.28)

c. **Mehsi** =olu nit qon-ahqaluwa-hsi-yin? CJ
IC.why =CTOP that.IN.SG long-have.tail$_{AI}$-DIM-2SG.CJ
‘**Why** is your tail so short?’ https://pmportal.org/dictionary/qonahqaluwe

d. **Tan** wet-ono-k wikhikon? CJ
WH IC.from-by.hand$_{TI}$-3CJ book
‘**Where** did he get the book?’ https://pmportal.org/dictionary/utonomon

e. **Tan** yut=oc mekonom-Ø? CJ
WH this.IN.SG=FUT IC.pick$_{TI}$-1SG.CJ
‘**Which** one shall I pick?’ https://pmportal.org/dictionary/kuhut

Note that *wh* questions do not use the complementizer *eli* (Bruening 2001b: 166).[2]

Occasionally, typically independent *wh* questions can be conjunct, like *tama* ‘where’, *tayuwe* ‘when’, and the handful of independent *keq* ‘what’ questions, as exemplified below:

(159) a. **Tama** wet-apeksi-hti-t yukk malihkin-ok? CJ
where IC.from-be.linked$_{AI}$-3PL-3CJ this.PROX.PL American-PROX.PL
‘**Where** do these Americans come from?’ https://pmportal.org/dictionary/malihkin

b. **Tayuwe** wasis kisi= wihqon-a-t tumahsis-ol? CJ
when kid IC.PFV= take$_{TA}$-3OBJ-3CJ frybread-OBV.SG
‘**When** did the kid take the frybread?’ (MA 2023.06.20)

c. Kil=lu **keq** ehcuwi= oluhki-yin? CJ
2SG=CTOP **what** IC.must= do$_{AI}$-2SG.CJ
‘And **what** are you supposed to do?’ https://pmportal.org/dictionary/cuwi-ahcuwi

I suspect that these are actually cleft questions, and thus involve relative clauses, which are always conjunct. For more discussion of *wh* questions and clause type, see Chapter 5.

[2]Note that, under its relative root guise *(o)li* ‘thus, to there’, we can find *eli* in *wh* questions introducing a manner or locative relative root complement. But this seems to be a different use than the semantically-bleached complementizer *eli*.

Relative clauses

All relative clauses are changed conjunct, whether they are externally-headed (160a), internally-headed (160b), or headless (160c):

(160) a. N-komitkom-a-ku-n **khakon** [$_{\text{CJ}}$ weci= =hp oloqi= nuta-ha-y].
1-block$_{\text{TI}}$-APPL-INV-N **door** IC.from= =CF away= out-go$_{\text{AI}}$-1SG.CJ
'She blocked **the door** [by which I could have exited].'
https://pmportal.org/dictionary/komitkomon

b. Ipa kt-akonutom-u-l-on [$_{\text{CJ}}$ nemiy-uk **aputamkon** pihce].
look 2-tell.story$_{\text{TI}}$-APPL-2OBJ-N IC.see$_{\text{TA}}$-1SG:3CJ **sea.serpent** long.ago
'Let me tell you about the **sea serpent**, [which I saw a long time ago].'
https://pmportal.org/dictionary/aputamkon

c. '-Pal-ka-ku-n [$_{\text{CJ}}$ kis-uwikho-k].
3-proud-CAUS$_{\text{TA}}$-INV-N PFV-write$_{\text{TI}}$-3CJ
'[What he wrote] makes him proud.' https://pmportal.org/dictionary/palkuwal

These also do not feature the complementizer *eli*.

Temporal adjuncts

Most temporal adjuncts are changed conjunct (with the exception of 'since' clauses, which are subordinative). Interestingly, all conjunct temporal adjuncts seem to have a 'when'-like meaning, basic examples of which I provide in (161).

(161) 'When' clauses

a. Sapet totoli-ntu-Ø-hpon [$_{\text{CJ}}$ peci-ya-yan].
Elizabeth PROG-sing$_{\text{AI}}$-3-PRET come-go$_{\text{AI}}$-1SG.CJ
'Sapet was singing when I arrived.' (EM, RP 2021.09.29)

b. Psonte=te imiye-wikuwam [$_{\text{CJ}}$ etol-imiya-mo-k].
be.full$_{\text{II}}$=EMPH pray-building IC.PROG-pray$_{\text{AI}}$-X-CJ
'The church is full during the service.' https://pmportal.org/dictionary/etoli-etol

c. Neket [$_{\text{CJ}}$ payis tekom-oki-yan], n-kisi= sqi-htah-a.
back.then pie IC.hit$_{\text{TA}}$-X.INV-1SG.CJ 1-can= aside-hit$_{\text{TA}}$-3OBJ
'When a pie was thrown at me, I could deflect it.'
https://pmportal.org/dictionary/asqihtahal

Again, these don't seem to use the complementizer *eli*.

We can use variations on this basic strategy to express other kinds of temporal adjuncts. 'Before' clauses are expressed with conjunct plus *mesq* 'not yet', producing temporal adjuncts that more literally can be translated 'while not yet…':

(162) ‘Before’ clauses

a. Piyel peci-ye-Ø [$_{\text{CJ}}$ **mesq** w-itapi-hi pehkihtahs-ulti-hti-h-q].
Peter come-go$_{\text{AI}}$-3 **not.yet** 3-friend-OBV.PL clean$_{\text{AI}}$-PL-3PL-NEG-3CJ
‘Piyel arrived **before** his friends cleaned.’ (GP, MA 2022.12.14)

b. K-nahs-ape-kh-a-n k-makson-ok [$_{\text{CJ}}$ **mesq** nuta-ha-w-on].
2-onto-lace-CAUS$_{\text{TA}}$-3OBJ-N 2-shoe-PROX.PL **not.yet** out-go$_{\text{AI}}$-NEG-2SG.CJ
‘Put the laces in your shoes **before** you go out.’
https://pmportal.org/dictionary/nahsapekhal

‘After’ clauses can be expressed with conjunct plus *kisi* ‘PFV’ or *mehci* ‘finish’, to create temporal adjuncts that more literally can be translated ‘when X has…’ or ‘when X finished…’:

(163) ‘After’ clauses

a. [$_{\text{CJ}}$ Otuhk **kisi=** peskh-uk] apc=ote apat-awsu-Ø.
deer **IC.PFV=** shoot$_{\text{TA}}$-1SG:3CJ again=EMPH back-live$_{\text{AI}}$-3
‘**After** I shot the deer, he came back to life.’ https://pmportal.org/dictionary/apatawsu

b. Piyel peci-ye-Ø [$_{\text{CJ}}$ w-itapi-hi **mehci=** pehkihtahs-ulti-hti-h-q].
Peter come-go$_{\text{AI}}$-3 3-friend-OBV.PL **IC.finish=** clean$_{\text{AI}}$-PL-3PL-NEG-3CJ
‘Piyel arrived **after** his friends cleaned.’ (GP, MA 2022.12.14)

And we can express meanings like ‘until’ using the particles *tokki(w)* ‘up to, until’ or *yaka* ‘then, afterward, until, unless’ together with the conjunct (sometimes even both):

(164) a. K-sankew-ossi-ni-ya [$_{\text{CJ}}$ **tokkiw** nutuw-Ø-eq mihku].
2-calm-lie$_{\text{AI}}$-N-PL **until** IC.hear$_{\text{TA}}$-3OBJ-2PL.CJ squirrel
‘Lie still **until** you hear the squirrel.’ https://pmportal.org/dictionary/mihku

b. Kotama apqot-ehte-wi-Ø *drugstore*, [$_{\text{CJ}}$ **yaka**, yey, mehc-imiya-m-k].
NEG open-be$_{\text{II}}$-NEG-3 drugstore **until** HES IC.finish-pray$_{\text{AI}}$-X-CJ
‘The drugstore wasn’t going to be open **until** after church.’
https://pmportal.org/dictionary/mehcimiye

c. Kat=te=hc=ona apc apaci-ye-w-Ø, [$_{\text{CJ}}$ **tokkiw** **yaka** =hc naci= wolasikotuwa-t Koluskapi-yil].
NEG=EMPH=FUT=ADD again back-go$_{\text{AI}}$-NEG-3 **until** **until** =FUT go= greet$_{\text{AI}}$-3CJ Koluskap-OBV.SG
‘And he will not return again **until** the day that he goes to greet Koluskap.’
https://pmportal.org/dictionary/apaciye

Focus

Optionally, clauses containing foci (specifically, information focus or contrastive focus) can be changed conjunct. I illustrate this for information focus—specifically, answers to *wh* questions—in (165–166). Like *wh* questions, this use of the conjunct lacks complementizer *eli*.

(165) Q: **Wen** nemiy-a-t Lacaw-ol?
who IC.see$_{\text{TA}}$-3OBJ-3CJ Roger-OBV.SG
'**Who** saw Roger?'

A1: **Nil** Ø-nomiy-a Laca. IND
1SG 1-see$_{\text{TA}}$-3OBJ Roger

A2: **Nil** nemiy-uk Laca. CJ
1SG IC.see$_{\text{TA}}$-1SG:3CJ Roger
Both: '**I** saw Roger.' (GP 2020.10.20;EN)

(166) Q: **Keqsey** kisi= mil-os-k Laca?
what IC.PFV= give$_{\text{TA+O}}$-2OBJ-3CJ Roger
'**What** did Roger give you?'

A1: **Wikhikon** n-kisi= mil-ku-n Laca. IND
book 1-PFV give$_{\text{TA+O}}$-INV-N Roger

A2: **Wikhikon** kisi= mil-i-t Laca. CJ
book IC.PFV give$_{\text{TA+O}}$-1OBJ-3CJ Roger
Both: 'Roger gave me **a book**.' (GP, RP 2020.09.29;EN)

Generally, both independent and conjunct are possible (full) answers to *wh* questions. However, occasionally speakers will express a slight preference for the conjunct answer, saying that while both mean the same thing and are possible answers, the conjunct answer sometimes "feels" more like an answer to the question. It remains to be seen what exactly this feeling corresponds to theoretically.

With contrastive focus, we also often get changed conjunct (again, lacking complementizer *eli*), though this is also not obligatory. In (167) we see examples of contrastive focus with conjunct, and in (168) we see examples of contrastive focus with independent.

(167) Conjunct with contrastive focus

a. Nemiy-uk **Koles** '-posu-m-ol, ma kahk Ø-mossis-om-ol. CJ
IC.see$_{\text{TA}}$-1SG:3CJ **Grace** 3-cat-POSS-OBV.SG NEG CFOC 3-older.sister-POSS-OBV.SG
'I saw **Grace's** cat, not her older sister's.' (GP, MA 2022.12.14)

b. Nil kisi-y-uk **yukk** sukolopanis-ok, ma kahk yekk. CJ
1SG IC.PFV-make$_{\text{TA}}$-1SG:3CJ **this.PROX.PL** cookie-PROX.PL NEG CFOC yonder.PROX.PL
'I make **these** cookies, not those.' (GP, MA 2022.12.14)

c. **Kil** nit itom-on, ma kahk nil. CJ
2SG that.IN.SG IC.say$_{\text{TI}}$-2SG.CJ NEG CFOC 1SG
'**You** said it, not I.' https://pmportal.org/dictionary/itomon

(168) Independent with contrastive focus

a. Ø-Nomiy-a **Roger** ’-temis-ol, kat kahk Tanya ’-temis-ol. IND
1-see$_{TA}$-3OBJ **Roger** 3-dog-OBV.SG NEG CFOC Tanya 3-dog-OBV.SG
‘I saw **Roger’s** dog, not Tanya’s dog.’ (EM 2022.12.21)

b. N-kisi-y-a-k **yukk** sukolopanis-ok, kat kahk nikt kotoki-k. IND
1-PFV-make$_{TA}$-3OBJ-PROX.PL **this.PROX.PL** cookie-PROX.PL NEG CFOC that.PROX.PL other-PROX.PL
‘I made **these** cookies, not those other ones.’ (EM 2022.12.21)

c. Piltuh-mahtu-Ø **Ikolisoman**, ma kahk kilun. IND
different-behave$_{AI}$-3 **white.man** NEG CFOC 21
‘The **white man** behaves differently, not us.’
https://pmportal.org/dictionary/piltuhmahtu

It may be that the choice of conjunct or independent with contrastive focus may convey some subtle semantic/pragmatic effect, but what that might be is not clear to me from the data I have.

Finally, when we have an argumental DP as the focus associate of *tehpu* ‘only’ (I have not investigated other focus-sensitive operators), we overwhelmingly often get changed conjunct (without complementizer *eli*):

(169) Conjunct with *tehpu* ‘only’

a. **Nil tehpu** wik-ahp-uk n-sukolopan-om. CJ
1SG only IC.like-eat$_{TA}$-1SG.3CJ 1-cake-POSS
‘**Only I** liked my cake.’ (EM 2023.03.28)

b. **Tehpu** peth-a-c-il **supeqihpon-ol**. CJ
only IC.catch$_{TA}$-3OBJ-3CJ-OBV.SG **sea.cucumber-OBV.SG**
‘All he caught was **a sea cucumber**.’ https://pmportal.org/dictionary/ame

c. **Tehpu** nemihtu-woq-il **wapikceksok-il**. CJ
only IC.see$_{TI}$-21CJ-IN.PL **white.of.eye-IN.PL**
‘We just saw the whites of his eyes.’ https://pmportal.org/dictionary/wapikceksok

In fact, the only independent instances of argument focus I could find among the examples in the online dictionary are the following two:

(170) Independent with *tehpu* ‘only’

a. **Tehpu** pipuw-ek-on-Ø iyey **mahkut**.
only thin-sheet-be$_{II}$-3 HES **dress**
‘She **just** had a thin, uh, **dress**.’ (lit. ‘**Only the dress** was thin.’)
https://pmportal.org/dictionary/pipuwekon

b. Nil =op =olu **tehpu** Ø-nisuwi-ne-n =op **wisaw-ahtuwe-t**.
1SG =CF =CTOP **only** 1-be.married$_{AI+O}$-N-1PL =CF **yellow-shine$_{AI}$-3CJ**
'The **only** one I'd marry would be **the shining yellow one**.'
https://pmportal.org/dictionary/wisawahtuwe

Note that we generally seem to get independent when the focus associate is not an argumental DP (but rather a VP, preverb, clausal adjunct, etc.). This is perhaps related to when *wh* questions are independent or conjunct (see Section 5 for some details), but I leave further evaluation of this speculation for future work.

Clausal standards of comparison

Clausal standards of comparison are changed conjunct, as in the following two examples:

(171) a. Mali 't-aqami-htu-n-ol mahkut-ol **katok** [$_{CJ}$ nil eli= kiseltom-uw-uk
Mary 3-more-have$_{TI}$-N-IN.PL dress-IN.PL **than** 1SG IC.thus= let$_{TI}$-APPL-1SG.CJ
n-tus '-kehs-onuhm-on].
1-daughter 3-many-buy$_{TI}$-N
'Mary has more dresses **than** [I would allow my daughter to buy].'
(Bruening 2006: 45)

b. N-koti= kceyawi= pson-a-k nil sikiliyem-ok **katok** [$_{CJ}$ nekom
1-going.to= many= catch$_{TA}$-3OBJ-PROX.PL 1SG cricket-PROX.PL **than** 3SG
eli= pson-a-t coqols-\`].
IC.thus= catch$_{TA}$-3OBJ-3CJ frog-OBV.PL
'I'm going to catch more crickets **than** [he's going to catch frogs].'
(Bruening 2006: 46)

Note that these feature *eli*, though here I've glossed it as the relative root *oli* 'thus' rather than a plain complementizer, following Bruening (2006).

Exclamatives

Degree exclamatives, expressing that something is very high on some scale, are formed using the preverb *etuci* 'IC.much' in its changed form—more commonly abbreviated to *eci*—plus conjunct:

(172) a. **Etuci=** kisi= cipoki-nta-q Roger! CJ
IC.much= can= loud-sing$_{AI}$-3CJ Roger
'Roger can sing so loud!' (GP, RP 2021.03.15)

b. **Eci=** nil wahkathoma-y! CJ
IC.much= 1SG have.little.sense$_{AI}$-1SG.CJ
'I have so little sense!' (EM 2021.10.20)

c. **Eci=** moc-okiskah-k. CJ
IC.much= bad-be.weather$_{II}$-CJ
'The weather is very bad.' https://pmportal.org/dictionary/eci

Crosslinguistically, there's a tight connection between *wh* movement and exclamatives, with several authors trying to understand the syntax-semantics mapping of *wh*-exclamatives (Gutiérrez-Rexach 1996, 2001, 2008, Zanuttini and Portner 2003, Castroviejo 2006, 2007, Rett 2011, a.m.o.). The use of the conjunct in Passamaquoddy exclamatives thus fits this crosslinguistic pattern.

Purpose clauses

Purpose clauses are expressed with conjunct, using *weci* 'IC.for', the changed form of the preverb *'ci* 'from, for':

(173) a. Nt-ap-onuw-a molaqs [$_{CJ}$ **weci=** kisi= sukolopan-ki-Ø].
1-come.from-buy$_{TA}$-3OBJ milk **IC.for=** can= cake-make$_{AI}$-1SG.CJ
'I bought milk [**so that** I could make a cake].' (EM 2022.12.07)

b. Nt-ahcuwi= li-ht-a-si-n ap [$_{CJ}$ **weci=** kisi= qeci= pson-uk nomehsu-wok].
1-must= thus-make$_{TI}$-APPL-REFL-N net **IC.for=** can= try= catch$_{TA}$-1SG:3CJ fish-PROX.PL
'I have to make myself a net [**so** I can try to catch some fish].'
https://pmportal.org/dictionary/ap

c. Akuwiw punomu-n yut man [$_{CJ}$ **weci=** skat wen nomihtu-h-k].
out.of.view put-2SG.IMP this.IN.SG money **IC.for=** NEG who see$_{TI}$-NEG-3CJ
'Hide this money [**so** no one will see it].' https://pmportal.org/dictionary/akuwiw

Reason clauses with *eli*

While typically reason clauses are expressed in the independent with the particles *'sami* 'because' or *ipocol* 'because', it's also possible to express a reason clause using the complementizer *eli* together with the conjunct, as in the following examples:

(174) a. Mace= mehtolihk-ahtu-Ø-wok pskihqimins-ok [$_{CJ}$ **eli** kis-ola-k wolaku].
start= rot$_{AI}$-PL-3-PROX.PL strawberry-PROX.PL IC.C PFV-rain$_{II}$-CJ yesterday
'The strawberries started rotting **because** it rained yesterday.' (GP, MA 2022.07.25)

b. Ma=te keq apqot-ehte-w-Ø kissonte, [$_{CJ}$ **eli** kis-amoqessi-k].
NEG=EMPH what open-be$_{II}$-NEG-3 Monday IC.C PFV-storm$_{II}$-CJ
'Nothing was open on Monday, **because** of the storm.'
https://pmportal.org/dictionary/kissonte

c. Wahkac n-kis-qahs, [$_{CJ}$ **eli** kisi= memhuwi-hpi-Ø].
hardly 1-can-sleep$_{AI}$ IC.C PFV= as.much.as.possible-eat$_{AI}$-1SG.CJ
'I could hardly sleep, **because** I had stuffed myself.'
https://pmportal.org/dictionary/memhuwihpu

Other languages seem to be able to use general-purpose complementizers to introduce reason clauses as well, like Spanish (Romance) with *que* (Alarcos Llorach 1994: 367, Corr 2017: Ch. 5).

Presentatives

There's a certain kind of matrix use of the (*eli*-less) changed conjunct that I've somewhat provisionally labelled "presentative" here, following a suggestion by Norvin Richards (p.c.). The presentative conjunct seems to be used in contexts where some event is happening in the direct perceptual domain of the discourse participants, or in narratives to add some sense of "vividness":

(175) a. Ap-sakiy-uk Gracie, cel wot=te weckuh-qepi-t! CJ
come.from-see$_{TA}$-1SG:3CJ Gracie even here-EMPH IC.to.here-sit$_{AI}$-3CJ
'When I went to see Gracie, she was sitting right here!' (RP 2020.12.01)

b. Elom-uhse-t Roger sonuciw. CJ
IC.away-walk$_{AI}$-3CJ Roger along.shore
'There goes Roger walking to the shore.' (GP, RP 2021.04.05)

c. Wot=ona sakhi-ya-t Mali Molahsoss! CJ
here=ADD IC.into.view-go$_{AI}$-3CJ Mary Molasses
'And here comes Mary Molasses!' (GP, DT 2023.01.25)

LeSourd (1988), in relation to this particular use of the conjunct, discusses the following two examples which contrast independent and conjunct:

(176) a. Ckuw-ye-Ø Piyel. IND
to.here-go$_{AI}$-3 Peter

b. Weckuw-ya-t Piyel. CJ
IC.to.here-go$_{AI}$-3CJ Peter
'Peter is coming toward here.' (LeSourd 1988: 42)

Of the independent version (176a), LeSourd writes that it expresses that Peter "is on his way but could be any distance away" (LeSourd 1988: 42), whereas he says that the conjunct version (176b) conveys that Peter is "coming down the road—you can see him" (LeSourd 1988: 42). Given LeSourd's description, the independent seems to just present the facts of the matter in the most neutral way possible, whereas the conjunct seems to convey something extra about the relevant event: namely, that it's happening right here, right now.

To observe the effect of this use of the conjunct in narratives, we can take a look at the following fictional mini-narrative, where I've bolded the conjunct verbs:

(177) a. N-kis-apqotehtu-n khakon,...
1-PFV-open$_{TI}$-N door
'I opened the door,...'

b. ...wot tahk Norvin **weckuwi-kapuwi-t**,...
this.PROX.SG EMPH Norvin **IC.to.here-stand$_{AI}$-3CJ**
'...and here Norvin is standing,...'

c. ...kamotu wot **sakhi-tokkuwi-t**, iya, cossi-naqsi-t psuwis,...
suddenly this.PROX.SG **into.view-jump$_{\text{AI}}$-3CJ** yeah annoy-seem$_{\text{AI}}$-3CJ cat
'...and suddenly this annoying cat jumps out,...'

d. ...on 't-ol-otokkuwam-a-n Norvin-ol naka, iyey, '-posokapen-a-n.
and 3-to.there-jump.on$_{\text{TA}}$-3OBJ-N Norvin-OBV.SG and HES 3-scratch$_{\text{TA}}$-3OBJ-N
'...and jumps all over Norvin and scratches him.' (GP 2022.11.02)

Here, there are two conjunct matrix clauses: *wot tahk Norvin weckuwikapuwit* 'here Norvin is standing' (177b) and *kamotu wot sakhitokkuwit cossinaqsit psuwis* 'suddenly this annoying cat jumps out' (177c). Note that these conjunct clauses advance the narrative forward, indicating that these aren't backgrounding, temporal adjunct uses of the conjunct. Instead, it seems like the speaker chose to use conjunct here to render the events more "vivid", in some sense, by treating these (fictional) events as if they were directly in the perceptual sphere of speaker and addressee.

It remains to be seen what exactly the syntactic and semantic properties of this use of the conjunct are, though it seems to bear several similarities with matrix "anaphoric" uses of the conjunct in Plains Cree (Cook 2014). And, at least at a surface glance, these kinds of sentences seem to fit what Wood and Zanuttini (2023) call the "pragmatic function of presentatives": "Presentatives draw the addressee's attention to the presence of some entity (or set of entities) or the unfolding of an event that is within the perceptual sphere or in the mind of the speaker." (Wood and Zanuttini 2023: 7).

Concessive clauses with *cika(w)*

The particle *cika(w)* 'even though, even if' can be used with the conjunct to create concessive clauses (note that other concessive clauses, using *alu(wehta)* and *apeq* 'although', are independent). With the changed conjunct this results in an 'even though' reading (178), and with the unchanged conjunct this results in an 'even if' reading (179).

(178) *Cika(w)* + changed conjunct = 'even though'

a. '-Kisi= qet-tehkom-on [$_{\text{CJ}}$ **cikaw** <u>eli=</u> <u>spalike-k</u>].
3-PFV= try-go.through$_{\text{TI}}$-N **though** <u>IC.thus=</u> <u>be.deep.snowdrift$_{\text{II}}$-CJ</u>
'He tried to walk through even though the snow was deep.'
https://pmportal.org/dictionary/cika-cikaw

b. [$_{\text{CJ}}$ **Cika=te** <u>etut-amoqessi-k</u>] mec=ote luk-hoti-n.
though=EMPH <u>IC.much-storm$_{\text{II}}$-CJ</u> still=EMPH work$_{\text{AI}}$-PL-N
'Even with this storm there is still work.' https://pmportal.org/dictionary/lukhotin

(179) *Cika(w)* + unchanged conjunct = 'even if'

a. [$_{\text{CJ}}$ **Cika=te** wen <u>koti=</u> <u>mace-ph-i-t</u>], ma=te n-koti=
though=EMPH who <u>want=</u> <u>leave-take$_{\text{TA}}$-1OBJ-3CJ</u> NEG=EMPH 1-want=
oli-ya-w-on.
there-go$_{\text{AI}}$-NEG-N
'Even if someone wants to take me, I don't want to go.'
https://pmportal.org/dictionary/cika-cikaw

b. [$_{CJ}$ **Cika=te** psa-k], mec luk-hotu-Ø-wok.
though=EMPH snow$_{II}$-CJ still work$_{AI}$-PL-3-PROX.PL
'Even if it's snowing, they still work.' https://pmportal.org/dictionary/luhke

Given that unchanged conjunct is what is found in conditional antecedents, this semantic contrast between changed and unchanged conjunct seems amenable to a compositional analysis, though I won't spell one out here.

Conditional antecedents (unchanged conjunct)

Conditional antecedents ('if' clauses) are always unchanged conjunct, whether we have an O-marked ("indicative") or X-marked ("counterfactual") conditionals, to use von Fintel and Iatridou's (2023) terminology:

(180) a. [$_{CJ}$ Skat=op komiwonu-h-k toke], n-kisi=te=hp naci= al-uhs.
NEG=CF rain$_{II}$-NEG-CJ now 1-can=EMPH=CF go= around-walk$_{AI}$
'**If** it wasn't raining right now, I could go out on a walk.' (EM 2022.1012)

b. [$_{CJ}$ **Tokec** nat-amki-hin wolakuk bingo], cu=op k-sikte= wikuwacul-ku-n.
now go-play$_{AI}$-2SG.CJ tonight bingo surely=CF 2-very= entertain$_{TA}$-INV-N
'**If** you go play bingo tonight, you'd have a lot of fun.' (lit. '...it would entertain you a lot.') (GP, RP 2020.09.29)

c. [$_{CJ}$ **Nehtaw** psiw kokeps-ahti-hti-t], kat=oc k-nuta-ku-wi-hik.
if all be.deaf$_{AI}$-PL-3PL-3CJ NEG=FUT 2-hear$_{TA}$-INV-NEG-PROX.PL
'**If** they are all deaf, they won't hear you.' https://pmportal.org/dictionary/kokepse

d. [$_{CJ}$ **Etoki=te** li= kis-ehtu-won], kt-ehqi= wtoma-n.
if=EMPH thus= can-do$_{TI}$-2SG 2-stop= smoke$_{AI}$-N
'**If** you can do it, stop smoking.'
https://pmportal.org/dictionary/etoki-te-etokiw-ote

Note that, while we don't need any particle to introduce a conditional antecedent (and we generally don't get any with negated antecedents), it's possible to use *tokec* 'now, if', *nehtaw* 'if', or *etoki(w)* 'if, whether' to introduce a conditional antecedent. I don't know if there are any semantic differences between these three particles.

Complement of *nopal* (unchanged conjunct)

As von Fintel and Iatridou (2023) observe, the complement of 'wish' predicates crosslinguistically takes the same morphology as found in an X-marked conditional antecedent. Passamaquoddy is no exception to this. The particle *nopal* 'if only, I wish'—historically deriving from *on=op=al* 'and=CF=NDIR' and occasionally realized as such, or as *op-al* or *ipal*—takes unchanged conjunct complements:

(181) a. **Nopal** wen koss-icuwe-n-ike-t. CJ
if.only who wash-dish-by.hand-ANTIP$_{AI}$-3CJ
'**I wish** someone would wash the dishes.' (EM 2021.12.01)

b. **Nopal** iyw-uk cikon. CJ
if.only have$_{TA}$-1SG:3CJ apple
'**I wish** I had an apple.' https://pmportal.org/dictionary/nopal-op-al-op-al-ipal

c. **Ipal** nomiy-ot not wasis. CJ
if.only see$_{TA}$-2SG:3CJ that.PROX.SG child
'**If only** you could have seen that child.' https://pmportal.org/dictionary/ptoqcokpe

4.2.3 Subordinative

Complement of certain predicates

Certain verbs, like *'pawatomon* 'want', *'kisehtun* 'make', and *'tolokimal* 'order' (among others) embed subordinative, as illustrated below:

(182) a. **N-pawatom-on** [$_{SUB}$ k-maw-ahya-woloti-ne-n].
1-want$_{TI}$-N 2-together-play$_{AI}$-PL-N-1PL
'I want us to play together.' https://pmportal.org/dictionary/olehlal

b. Mam=ote **'-kisehtu-w-a-ni-ya** [$_{SUB}$ Ø-nuta-ha-li-n].
finally=EMPH **3-make$_{TI}$-APPL-3OBJ-N-PL** 3-out-go$_{AI}$-OBV-N
'They finally got him to go out.' https://pmportal.org/dictionary/kisehtuwan

c. Roger **n-kisi= olokim-oq** [$_{SUB}$ n-ciksotuw-a-n Ø-nican-ol].
Roger **1-PFV= order$_{TA}$-INV** 1-listen.to$_{TA}$-3OBJ-N 3-child-OBV.SG
'Roger **ordered** me to listen to his child.' (EM 2021.12.01)

The non-inflecting particle *kamot* 'it would be better' embeds subordinative as well:

(183) a. **Kamot=te** [$_{SUB}$ k-wisa-naqsi-n]!
better=EMPH 2-hurry-look$_{AI}$-N
'You'**d better** hurry!' (EM 2022.12.21)

b. **Kamot=op** [$_{SUB}$ skat Ø-nipuwi-w-one-wi-nu-hpon].
better=CF NEG 1-be.married$_{AI}$-NEG-N-NEG-1PL-PRET
'We shouldn't have gotten married.'
https://pmportal.org/dictionary/kamot-kamot-op-kamot-te

See Section 6.1 for more details on which predicates embed subordinatives—I show that subordinative complements correspond to Wurmbrand and Lohninger's (2023) situation and event complements.

Coordination

Subordinative is also very commonly found in the second conjunct of coordinations, no matter what the clause type of the first conjunct is. In particular, as Ng (2002: 30) notes and I argue for in detail in Section 6.2, this kind of subordinative coordination typically conveys that the second conjunct temporally and/or causally follows from the first. We can illustrate this with the following examples:

(184) a.

Katkuhk	poneqi-ye-Ø	**naka**	[$_{SUB}$	Ø-nuk-cok-tah-a-n	pskihqimins-`	].
pot	down-go$_{AI}$-3	**and**		3-soft-squishy-hit$_{TA}$-3OBJ-N	strawberry-OBV.PL	

‘The pot fell and squashed the strawberries.’ (GP, MA 2022.06.28)

b.

…psi=te=hc	wen	wonaku-Ø	**naka**	[$_{SUB}$	’-pom-oka-n	].
all=EMPH=FUT	who	get.up$_{AI}$-3	**and**		3-along-dance$_{AI}$-N	

‘…everyone gets up **and** dances.’ https://pmportal.org/dictionary/asseloma

c.

…’-kin-apom-a-`	**naka**	[$_{SUB}$	Ø-naska-htaqsuw-am-a-n	].
3-big-look$_{TA}$-3OBJ-OBV.PL	**and**		3-anger-sound$_{AI}$-TA-3OBJ-N	

‘…he glares at them **and** shouts at them angrily.’

https://pmportal.org/dictionary/kinapomal

In each of the sentences above, the first conjunct is independent and the second subordinative. Additionally, the subordinative conjunct temporally follows from the first, and is causally enabled by the first in (184a–b).

Clause chaining

A related use of the subordinative is in a kind of narrative sequencing, clause chaining construction (see also Quinn 2004, 2007 on the same kind of construction in the closely-related Penobscot). In this construction, common in narratives, the speaker typically begins with an independent verb to set the scene, and the follows it up with a few verbs in the subordinative, describing the events that transpired from there, with or without overt coordinators. To illustrate, let’s consider the first three sentences of the story “*Nilun Ntehpitem api-Musuhkiyek* [When My Wife and I Went Moose-hunting]”, as told by Frank Tomah (https://pmportal.org/videos/when-my-wife-and-i-went-moose-hunting). Below, I bold each main verb and superscript its clause type.

(185) a.

Yut	weci=	maca-ha-yek	**miyahsi-w**^{IND},
here	IC.from=	leave-go$_{AI}$-1PL.CJ	be.early$_{II}$-3

‘When we left here, **it was early**^{IND},’

b.

…tett	**nt-oloqi-ya-ne-n**^{SUB}	ihik	eli-wihtasi-k	*Telephone Road.*
that.way	**1-that.way-go$_{AI}$-N-1PL**	HES.LOC	IC.thus-be.called$_{II}$-CJ	Telephone Road

‘…and **we went**^{SUB} by way of what’s called the Telephone Road.’

c.

Nt-ali=	**wiwoni-ya-ne-n**^{SUB}	nit	*Tomah Road*,	woli-te	*East-West Road.*
1-around=	**in.circle-go$_{AI}$-N-1PL**	that.IN.SG	Tomah Road	right.away	East-West Road

‘**We went around**^{SUB} by the Tomah Road, and right on to the East-West Road.’

In the first sentence, we have an independent verb *miyahsiw* 'it was early', setting the stage for the story.[3] The second sentence features the verb *ntoloqiyanen* 'we went that way', in the subordinative, and then the third sentence contains the verb *ntali-wiwoniyanen* 'we went around', also in the subordinative. This is the characteristic clause chaining use of the subordinative, where sequential events in a narrative are inflected in the subordinative. The relationship between clause chaining and cordination is clear—I think it's reasonable to assume that this clause chaining use of the subordinative really is just a(n often asyndetic) subtype of subordinative coordination.

Conditional consequents

It's also common to find subordinative in the consequent of a conditional, as below:

(186) Subordinative in conditional consequents

a. [$_{\text{SUB}}$ Piyel Ø-mace= eksqi-n] psuwis tuci-ya-t.
Peter 3-start= sneeze$_{\text{AI}}$-N cat by-go$_{\text{AI}}$-3CJ
'Peter starts sneezing if a cat walks by.' (GP, DT 2023.01.25;EN)

b. Skat ciksotom-uw-an [$_{\text{SUB}}$ on=oc n-mat-oliqe-htuh-uke-n].
NEG listen$_{\text{AI}}$-NEG-1SG.CJ then=FUT 1-fight-EXPL-hit$_{\text{TA}}$-INV.X-N
'If I didn't obey, then I'd get a good licking'
https://pmportal.org/dictionary/aspiqtahal

c. Tokec=op cuwihta-q walke-wey, [$_{\text{SUB}}$ kat=op nit '-kehs-alka-w-on].
now=CF hire$_{\text{TI}}$-3CJ dig-NMLZ NEG=CF that.IN.SG 3-much-dig$_{\text{AI}}$-NEG-N
'If he hired a back-hoe he wouldn't have to dig so much.'
https://pmportal.org/dictionary/kehsalke

However, this is far from obligatory, and we also often get conditional consequents:

(187) Independent in conditional consequents

a. Etokiw kis-ola-k wolaku, [$_{\text{IND}}$ ma=te tama kisi= li-ye-w].
if PFV-rain$_{\text{II}}$-CJ yesterday NEG=EMPH where PFV= to.there-go$_{\text{AI}}$-NEG
'If it rained yesterday, then she didn't go out.' (EM 2021.10.06)

b. Tomhuwi-yin, [$_{\text{IND}}$ cu k-ut-tihik].
win$_{\text{AI}}$-2SG.CJ then 2-from-hit$_{\text{AI}}$
'If you win, you will get a prize.' https://pmportal.org/dictionary/tomhuwe

c. [$_{\text{IND}}$ Pisuwi-y-a yaq not] oqim-ut '-pithopa-n.
falsely-do.to$_{\text{TA}}$-3OBJ REP that.PROX.PL blame$_{\text{TA}}$-X:3CJ 3-serve.alcohol$_{\text{AI}}$-N
'He is blameless, if he is being blamed for bootlegging.' (lit. 'He is falsely accused, if he is being blamed for serving alcohol.') https://pmportal.org/dictionary/oqimal

I do not know if there is any syntactic or interpretive difference between these two options.

[3] Strictly speaking, since this is an II verb with a singular subject, we can't tell whether it's independent or subordinative. I assume it's independent, given that it's the first matrix verb of the whole narrative.

Clause modified by temporal adjunct

Similarly to the use of subordinative in conditional consequents, it's also possible to find subordinative in a clause modified by a temporal adjunct (in a similar way to how a conditional consequent is a clause modified by a conditional adjunct):

(188) Subordinative in clauses modified by temporal adjuncts

a. Peci-ya-yan, [$_{\text{SUB}}$ nit=te mace-ntu-n Sapet].
IC.come-go$_{\text{AI}}$-1SG.CJ then=EMPH start-sing$_{\text{AI}}$-N Elizabeth
'When I arrived, Elizabeth started singing.' (EM, RP 2021.09.29)

b. Etol-okihke-t [$_{\text{SUB}}$ on '-peci= ksinuhka-n].
IC.PROG-garden$_{\text{AI}}$-3CJ then 3-come= be.sick$_{\text{AI}}$-N
'When he was planting, he got sick.' https://pmportal.org/dictionary/kihke

c. Tan etuci= apaci-ya-li-t, [$_{\text{SUB}}$ 't-askuhy-a-ni-ya].
WH IC.much= back-go$_{\text{AI}}$-OBV-3CJ 3-wait.for$_{\text{TA}}$-3OBJ-N-PL
'When he returned, they were waiting for him.'
https://pmportal.org/dictionary/askuwyal-t-askuhyal

Again, just like with conditional consequents, it's also quite common to find independent in this context:

(189) Independent in clauses modified by temporal adjuncts

a. Peci-ya-t Sapet [$_{\text{IND}}$ nt-otol-ahqe-hpon].
IC.come-go$_{\text{AI}}$-3CJ Elizabeth 1-PROG-cook$_{\text{AI}}$-PRET
'When Elizabeth arrived, I was cooking.' (EM, RP 2021.09.29)

b. [$_{\text{IND}}$ Cuhpi-ye-Ø pilsqehsis] yal-asuke-t.
into.water-go$_{\text{AI}}$-3 girl IC.around-wade$_{\text{AI}}$-3CJ
'The girl fell in the water while wading around.'
https://pmportal.org/dictionary/cuhpiye

c. Kisi= muh-uk cikon, [$_{\text{IND}}$ n-kosinuhka-q].
IC.PFV= eat$_{\text{TA}}$-1SG:3CJ apple 1-sicken$_{\text{TA}}$-INV
'When I ate the apple, it made me sick.' https://pmportal.org/dictionary/mahal

I do not know what syntactic and/or semantic differences there are between using subordinative or independent in these contexts. However, impressionistically, it seems that subordinative is more common when there's some kind of 'then' particle in the matrix clause, like *nit-te* 'then' or *on* 'and, then'.

'Since' clauses

While most temporal adjuncts are changed conjunct, 'since' clauses are subordinative. These are formed by putting the particle *tane(hk)* 'since' at the beginning of the clause, inflecting the verb in the subordinative, and then suffixing the verb with *-hk*, which I gloss 'since' here:

(190) a. N-ulitahas=ote [$_{SUB}$ **tanehk** n-kis-ewestuwam-a-ne-hk].
1-be.happy$_{AI}$=EMPH **since** 1-PFV-talk.to$_{TA}$-3OBJ-N-since
'I've been happy **since** I talked to her.' https://pmportal.org/dictionary/hk-1

b. [$_{SUB}$ **Tanehk** mace= pisk-olanu-hk] ma=te tama n-kisi= li-ya-w.
since start= dark-rain$_{II}$-since NEG=EMPH where 1-can= to.there-go$_{AI}$-NEG
'**Ever since** it began to rain so hard, I haven't been able to go anywhere.'
https://pmportal.org/dictionary/piskolan

c. [$_{SUB}$ **Tane** n-kisi= matonahkatom-one-nnu-hk ktahkomiq], k-wesuwe=
since 1-PFV= fight.for$_{TI}$-N-1PL-since land 2-back=
psonom-one-n kehso-k man.
get$_{TI}$-N-1PL IC.be.much$_{II}$-CJ money
'**Ever since** we fought for the land, we've gotten so much money back.'
https://pmportal.org/dictionary/matonahkatomon

The suffix *-hk* is likely some kind of locative suffix, related to the normal locative *-k*. In fact, there's a nominal locative suffix *-hk* which means 'at the home of'—Leavitt (1996: 27) provides examples like *Mali-hk* 'at Mary's' and *sakoma-hk* 'at the chief's'. Additionally, in Wampanoag, there's a form of the subordinative with a suffix *-t* (also a locative suffix), which Goddard and Bragdon (1988) called the "T-subordinative", which is plausibly related (at least by a distinct but parallel development) to Passamaquoddy *-hk* subordinatives. Interestingly, the Wampanoang T-subordinative is used in 'until' clauses (Norvin Richards, p.c.), which is tantalizingly similar (but still different) from Passamaquoddy *-hk* subordinatives in 'since' clauses.

***Pihce* 'for a long time'**

The particle *pihce*, combined with a subordinative verb, means 'for a long time':

(191) *Pihce* + subordinative = 'for a long time'

a. **Pihce** kt-otol-askuwy-ul-on. SUB
long.time 2-PROG-wait.for$_{TA}$-2OBJ-N
'I've been waiting for you **for a long time**.' (EM 2023.02.28)

b. **Pihce** nt-iyali= kiluw-apom-a-n not skitap. SUB
long.time 1-around= seek-look$_{TA}$-3OBJ-N that.PROX.SG man
'I've been looking for that man **for a while now**.'
https://pmportal.org/dictionary/kiluwapomal-qiluwapomal

c. **Pihce** 't-iyali= wikinom-uw-a-ni-ya Ena-wol pesqon-ul SUB
long.time 3-around= desire$_{TI}$-APPL-3OBJ-N-PL Anna-OBV.SG one-IN.PL
't-olayyektakonu-m-ol.
3-toy-POSS-IN.PL
'They have been desiring some of Anna's toys **for a while now**.'
https://pmportal.org/dictionary/wikinomuwan

Interestingly, when *pihce* appears in an independent clause (or, perhaps more accurately, a clause that isn't subordinative), it means 'a long time ago':

(192) *Pihce* + independent = 'a long time ago'

a. | **Pihce** | kin-akisu-Ø-wok | sumalkin-ok. | IND |
|---|---|---|---|
| **long.time** | big-be.round$_{\text{AI}}$-3-PROX.PL | copper.penny-PROX.PL | |

'**A long time ago** copper pennies were big in diameter.'
https://pmportal.org/dictionary/sumalkin

b. | **Pihce** | ktanaqsu-Ø-poni-k | pqapiti-yik. | IND |
|---|---|---|---|
| **long.time** | be.abundant$_{\text{AI}}$-3-PRET-PROX.PL | beaver-PROX.PL | |

'A long time ago beavers used to be plentiful.'
https://pmportal.org/dictionary/qapit-pqapit

c. | **Pihce** | skicinu-wok | 't-esun-a-wa-` | weyossis-uwewi-yi. | IND |
|---|---|---|---|---|
| **long.time** | Indian-PROX.PL | 3-trade$_{\text{TA}}$-3OBJ-PL-OBV.PL | animal-fur-OBV.PL | |

'Long ago the people traded animal pelts.'
https://pmportal.org/dictionary/esunal

This seems tantalizingly compositional, but I leave closer examination of this for future work.

Polite imperatives

Finally, subordinatives can be used as what is typically described as a "polite" or "mild" imperative:

(193) a. | K-pet-uwikhomuw-i-n! | SUB |
|---|---|
| 2-come-write.to$_{\text{TA}}$-1OBJ-N | |

'Write to me!' (EM 2022.12.21)

b. | K-nihkani= | mattoktehmuw-i-n | koti= | peci-ya-yin. | SUB |
|---|---|---|---|---|
| 2-ahead= | call$_{\text{TA}}$-1OBJ-N | going.to= | come-go$_{\text{AI}}$-2SG.CJ | |

'Call me first if you're going to come.' (EM 2023.02.28)

c. | Tan=ote | eli-ya-yin, | k-ul-ankeya-si-n. | SUB |
|---|---|---|---|
| WH=EMPH | IC.to.there-go$_{\text{AI}}$-2SG.CJ | 2-good-care.for$_{\text{TA}}$-REFL-N | |

'Wherever you go, take good care of yourself.'
https://pmportal.org/dictionary/ulankeyuwal

It remains to be seen how best to characterize the sensation of "politeness" or "mildness" associated with a subordinative directive, especially when compared to standard imperatives (which are presumably more direct and less polite) or questions with *mec-op-al kisi...* 'please could...' used with directive force (which are presumably less direct and more polite).

Crosslinguistically, it's relatively common for structurally-reduced, "deranked" clauses (to use a term from Stassen 1985) to be used as a kind of stylistic alternative to standard imperatives: infinitives in many European languages, a sequential converb in Siberian Yupik (Inuit-Yupik-Unangan), nominalizations in Korean (Koreanic), and so on (Aikhenvald 2010: §8.4). The use of the subordinative as this kind of polite directive thus fits in very well with this typological tendency.

4.2.4 How should we categorize this data?

I've just presented what is essentially just a list of uses of each clause type. However, if we want to understand why it is that each clause type appears where it does, it would be useful to understand which uses cohere together into subcategories, even if only descriptive, more surface-level ones. It is to this task that I turn now.

The distribution of the unchanged conjunct is the easiest to understand: at its core, it just marks conditional antecedents. Its other uses, like in *cika(w)* 'even if' concessive clauses or in the complement of *nopal* 'if only, I wish' are easily derivable from that more basic use.

The changed conjunct, on the other hand, seems to primarily appear in two distinct kinds of contexts. The first is in complement clauses introduced by some kind of complementizer (e.g. *eli* and/or initial change), which includes Wurmbrand and Lohninger's (2023) proposition complements as well as *eli* 'because' clauses (and potentially also *weci* purpose clauses, if that *weci* is a complementizer). The second is in various kinds of Ā dependencies (besides those limited *wh* questions which trigger independent): *wh* questions, relative clauses, temporal adjuncts (under the assumption that they involve Ā extraction of a temporal operator; Geis 1970, 1975, Larson 1987, Haegeman 2009, a.m.o.), focus (see Bruening 2001b: §4.4.1–4.4.3 for arguments that this kind of conjunct-triggering focus involves Ā movement), standards of comparison (given that comparatives involve Ā extraction of a degree operator; Ross 1967, Chomsky 1977, von Stechow 1984, Heim 1985, Bruening 2006: §4.2, a.m.o.), exclamatives (which crosslinguistically involve *wh* movement), and perhaps even presentatives, if those involve something like focus movement, as proposed by Zanuttini (2017: 246–247). Under this bipartite division of the changed conjunct, the only "residue" is *cika(w)* 'even though' clauses and (potentially) purpose clauses.

We can divide up the uses of the subordinative into three categories. The first is those contexts that involve structurally-reduced clauses: Wurmbrand and Lohninger's (2023) situation and event complements, asymmetric coordination (Bjorkman 2012, 2013) and by extension clause chaining, and polite imperatives. The second is optionally in clauses that are modified by temporal adjunct clauses or by conditional antecedents. The third is what we can very pre-theoretically call "some temporal stuff": that is, the use of the subordinative with *tane(hk)* 'since' clauses as well as with *pihce* 'for a long time'. It may be possible to somehow unite these last two categories, but that's an issue for future research.

Finally, the independent ends up emerging as the default matrix-clause-like clause type when nothing else is going on (e.g. no Ā movement, no complementizer, no clausal reduction). This accounts for its use in information-structuraly unmarked matrix declaratives, polar and alternative questions, under predicates like *itom* 'say' and *litahasu* 'think' which typically allow for main clause phenomena, as well as those adjuncts that aren't built up by Ā movement, like 'because' and 'although' clauses (Haegeman 2010: §5.1). The residue, then, is the set of *wh* questions that prefer to be independent.

To summarize, we end up with the following high-level division of clause type uses:

- **Independent**:

    1. default large clause (matrix clauses without Ā movement, adjunct clauses without *wh* movement, embedded main clause phenomena)

  residue: independent *wh* questions

- **Changed conjunct**:
    1. Ā movement (*wh* questions, relative clauses, temporal adjuncts, focus, comparatives, exclamatives, presentatives)
    2. large clauses with complementizers (proposition complements, *eli* 'because' clauses, maybe *weci* purpose clauses)

  residue: cika(w) 'even though' clauses, *weci* purpose clauses (maybe)

- **Unchanged conjunct**:
    1. conditional antecedents (conditional antecedents, *cika(w)* 'even if', *nopal* 'if only')

- **Subordinative**:
    1. CP-less clauses (situation and event complements, asymmetric coordination, clause chaining, polite imperatives)
    2. (optionally) clause modified by temporal/modal adjunct clause (conditional consequents, clause modified by temporal adjunct)
    3. "some temporal stuff" (*tane(hk)* 'since' clauses, *pihce* 'for a long time')

It remains to be seen whether this particular high-level division is an accurate one (most probably not), or even just a useful one (I hope it is that). The hope of this section is that it should prove useful for future work that seeks to understand more broadly the distribution of independent, conjunct, and subrdordinative clauses in Passamaquoddy, as well as comparative work that compares different uses and functions of the clause types across different Algonquian languages. I think the most pressing questions to explore are how the Ā and complement clause subcategories of the changed conjunct relate to each other, as well as how to link together the three rather distinct looking uses of the subordinative. And, if good answers to these questions emerge, hopefully an understanding of the "residue" of this categorization will emerge.

4.3 Conclusion

In this chapter, we've taken a look at the surface morphological and syntactic properties of independent, conjunct, and subordinative clauses. In the domain of morphology, we've seen reasons to think that subordinative clauses are structurally-reduced relative to conjunct and independent clauses—namely, subordinative verbs lack peripheral suffixes, which are present in independent and conjunct verbs. In the domain of syntax, I've provided an extensive descriptive overview of the various uses of independent, conjunct, and subordinative clauses. In the chapters to come, we'll examine the interaction between Ā phenomena and clause type, building a syntactic argument about the size of different kinds of clauses (Chapter 5), and then I'll link these conclusions to the distribution of different clause types in complementation and coordination, following Wurmbrand and Lohninger's (2023) and Bjorkman's (2012, 2013) proposals about how clause size links to different complementation and coordination structures (Chapter 6). By the end of this first part of the thesis, we'll hopefully come out with a better understanding of why exactly independent, conjunct, and subordinative clauses have the morphosyntactic properties they do—namely, it's all a consequence of clause size—as well as a better understanding of how the apparently idiosyncratic distribution of different clause types in Passamaquoddy is actually quite natural, reflecting robust crosslinguistic generalizations and tendencies.

Chapter 5

Ā phenomena and clause size

In this chapter I examine a variety of Ā and Ā-related phenomena in Passamaquoddy as a lens into clause size: *wh* movement, relativization, long-distance agreement, successive-cyclic movement. The core assumption that much of the argumentation here rests on is that these phenomena crucially implicate the CP layer. The result of this investigation will be that independent and conjunct clauses are fully able to participate in a wide variety of Ā phenomena, whereas subordinative clauses are much more restricted in this regard, suggesting that independent and conjunct clauses contain a CP layer whereas subordinative clauses do not. And, once we start examining the interactions between these various processes—in particular, interactions between long-distance agreement and long-distance Ā extraction—we learn that independent and conjunct clauses divide up into (at least) two classes: some are larger, phasal CPs, and others are smaller, non-phasal CPs.

Before we jump into the main argumentation, I'd first like to offer some brief justification for the core assumption that Ā phenomena in Passamaquoddy involve the CP layer, at least for the case of *wh* movement and relativization (see also Bruening 2001b). Starting with *wh* movement, the first thing to notice is that Passamaquoddy has obligatory overt *wh* movement (Bruening 2001b: §3.2). If *wh* items are not in a clause-initial position, they must be interpreted as existential quantifiers—in other words, they are quexistentials, to use Hengeveld et al.'s (2022) term:[1]

(194) a. **Tama** 'ci-ye-Ø Piyel welaqik?
where from-go$_{\text{AI}}$-3 Peter last.night
'**Where** did Peter go last night?' (EM 2023.01.22)

b. Piyel 'ci-ye-Ø **tama** welaqik.
Peter from-go$_{\text{AI}}$-3 **where** last.night
'Peter went **somewhere** last night.' (EM 2023.01.22)

[1] It's also possible for clause-initial *wh* items to also be interpreted as existential quantifiers (though there is usually a garden-pathing effect), but this is because word order is independently quite free in Passamaquoddy:

(i) Tama olomi-ye-Ø-hpon Roger.
where away-go$_{\text{AI}}$-3-PRET Roger
'Where did Roger go?' or 'Roger went somewhere.' (GP 2021.04.05)

(195) a. **Tama** Sapet olomi-y-ya?
where Elizabeth away-go$_{AI}$-PROX.SG.ABSN
'**Where** did Elizabeth go?' (EM, RP 2022.05.09)

b. Sapet olomi-y-ya **tama**?
Elizabeth away-go$_{AI}$-PROX.SG.ABSN **where**
'Did Elizabeth go **somewhere**?' (EM 2023.05.09)
#'**Where** did Elizabeth go?'

In (194), we see the basic contrast: sentence-initial *tama* 'where, somewhere' is most naturally interpreted as a *wh* question (194a), whereas non-sentence-initial *tama* 'where, somewhere' is most naturally interpreted as plain existential quantifier (here, in a declarative). In (195), we see that if we try to get a question interpretation for non-initial *tama* (195b), only a polar question is possible, not a *wh* question.

Additionally, as Bruening (2001b: 81) notes, the only material that reliably precedes *wh* items are left-dislocated topics (including certain kinds of scene-setting material), as well as left-edge particles, like *nit-te* 'right away', *apc* 'again, then, else', *nehe* 'okay, well then', and conjunctions:

(196) Left-dislocated topics

a. **Kil** =op =olu tan kt-ol-luhka-n?
2SG =CF =CTOP WH 2-thus-do$_{AI}$-N
'But what would you do?' (Bruening 2001b: 187)

b. Ma=te n-kosiciy-a-wi [**wot** =olu **n-tatat**, tan yut
NEG=EMPH 1-know$_{TA}$-3OBJ-NEG **this.PROX.SG** =CTOP **1-father** WH this.IN.SG
keti= nomkuwalsi-t atomupil].
IC.going.to= borrow$_{AI}$-3CJ car
'I don't know which car, my father, he's going to borrow.' (Bruening 2001b: 187)

c. **Kil**, keq kesi= ihi-n?
2SG what IC.very= have$_{TI}$-2SG.CJ
'You, what do you like?' (GP, DT 2023.01.25;EN)

d. **Ap-onuw-ot** **molaqs**, keq kisihtu-won?
IC.back.from-buy$_{TA}$-2SG:3CJ **milk** what IC.make$_{TI}$-2SG.CJ
'After you bought milk, what did you make?' (EM 2022.12.07)

(197) Left-edge particles

a. **Nit-te** **apc** keqsey '-koti= ol-luhk?
right.away **again** what 2-going.to= thus-do$_{AI}$
'Right now then, what are you going to do?' (Bruening 2001b: 76)

b. **Nehe**, keq '-koti= ol-luhk toke?
okay what 2-want= thus-do$_{AI}$ now
'Okay, what do you want to do now?' https://pmportal.org/dictionary/nehe

c. Tayuwek Roger olomi-ye-Ø-ss, **naka** tama koti= li-ye-Ø-ss?
when Roger away-go$_{AI}$-3-DUB **and** where want= there-go$_{AI}$-3-DUB
'When did Roger leave, and where did he want to go?' (EM 2023.05.30)

Importantly, Bruening shows that left-dislocated topics are able to violate islands, and thus proposes that they are base-generated in a clause-peripheral position. Taken together, this data seems to suggest that *wh* items obligatorily move to a high CP-layer position in *wh* questions, and the only positions higher than this are those occupied by base-generated left-dislocated topics as well as certain kinds of left-edge particles.

Turning now to relative clauses, we can show that CP is crucially implicated in their formation due to an Ā agreement process in Passamaquoddy involving the peripheral suffix, which realizes C (see Bruening 2001b: §4.3, Reintges et al. 2006: §7.4, and Section 10.3.2 of this dissertation for more discussion). In relative clauses in Passamaquoddy, the peripheral suffix can optionally appear (recall that relative clauses are always conjunct, and peripheral agreement is optional in the conjunct). When it does appear, it agrees with the head of the relative clause:

(198) a. Piyel '-kis-onuw-a-l [sukolopan-ol wik-ahp-a-c-**il**].
Peter 3-PFV-buy$_{TA}$-3OBJ-OBV.SG cake-OBV.SG like-eat$_{TA}$-3OBJ-3CJ-**OBV.SG**
'Peter bought the cake that he likes.' (GP, MA 2022.11.16)

b. Weni-k [nikk wasis-ok etol-ahsom-a-c-**ik**
who-PROX.PL that.PROX.PL child-PROX.PL IC.PROG-feed$_{TA}$-3OBJ-3CJ-**PROX.PL**
'-temis-uwa-`]?
3-dog-PL-OBV.PL
'Who are the kids that are feeding their dog?' (GP, MA 2022.11.30)

c. Newi-w-ok [skitapi-yik tehsahq-aph-a-c-**ik**
be.four$_{AI}$-3-PROX.PL man-PROX.PL IC.above-track$_{TA}$-3OBJ-3CJ-**PROX.PL**
otuhk-ol].
deer-OBV.SG
'A party of four men tracked the deer on high ground.' (lit. 'The men that tracked the deer on high ground were four.') https://pmportal.org/dictionary/tehsahqaphal

That C agrees with the head of the relative clause suggests that the Ā probe involved in creating a relative clause dependency is located in C (see Bruening 2001b: §3.3 for arguments that Ā movement is involved in relative clause formation in Passamaquoddy, and see also Section 10.3.2 of this thesis; we also show that this pattern really is Ā agreement not simple nominal concord).

So, we can take for granted that CP is crucially implicated in Ā phenomena in Passamaquoddy, as both a trigger and landing site for Ā movement. With this assumption, we can use Ā phenomena as a lens into clause size. In Section 5.1, I'll argue that independent and conjunct clauses admit Ā movement to their edges, but subordinative clauses do not. In Section 5.2, I show how this difference helps explain the difference in the locality properties of long-distance agreement (LDA) into independent and conjunct clauses on the one hand, where LDA is free, and subordinative clauses, where LDA is only possible with the embedded argument in the highest A position. Finally, Section 5.3 examines the interaction of Ā movement (especially long-distance Ā movement) and LDA, concluding that subordinative clause edges cannot host intermediate copies of long-distance Ā movement, and that different kinds of independent and conjunct clauses come in different sizes of CPs.

5.1 Ā extraction

In this section, we'll examine how different clause types interact with Ā extraction, primarily focusing on *wh* questions, though we'll also take a look at relative clauses and other Ā extraction contexts. As argued above, we can be reasonably certain that *wh* movement and relativization really do involve CP in Passamaquoddy. Before we dive into the details, let's first establish some basic properties of *wh* question and relative clause formation.

We can distinguish two ways of forming *wh* questions: plain *wh* movement and *wh*-scope marking.[2] In plain *wh* movement, the *wh* phrase directly appears in its scope position, potentially long-distance:

(199) a. **Keq** '-kisi= ol-luhk ⟨keq⟩ pemkiskahk?
what 2-PFV= thus-do$_{AI}$ today
'What did you do today?' (GP, RP 2021.04.26)

b. **Weni-l** Roger pawatom-uw-i-t [nt-ol-ewestuwam-a-n ⟨wenil⟩]?
who-OBV.SG Roger IC.want$_{TI}$-APPL-1OBJ-3CJ 1-thus-talk.to$_{TA}$-3OBJ-N
'Who did Roger want me to talk to?' (EM 2022.12.07)

c. **Weni-l** Tiger nutuw-a-t [⟨wenil⟩ etol-ewestuwam-i-nokot]?
who-OBV.SG Tiger IC.hear$_{TA}$-3OBJ-3CJ IC.PROG-talk.to$_{TA}$-1OBJ-3:1PL.CJ
'Who did Tiger hear talking to us?' (GP, MA 2023.01.31)

In (199a) we have a basic monoclausal *wh* question, always featuring plain *wh* movement, and in (199b-c) we have two long-distance *wh* questions formed by the plain *wh* movement strategy.

[2] There are also *wh*-copy constructions, where intermediate copies of *wh* movement are spelled out at CP edges, as illustrated below:

(i) a. **Keqsey** Cora nuto-k [**keq** Piyel ito-k]?
what Core IC.hear$_{TI}$-3CJ **what** Peter IC.say$_{TI}$-3CJ
'What did Cora hear Peter say?' (GP 2023.01.30;NR)

b. **Tan**=al 't-olitahasi-n Cora [**tan** elomi-ya-li-t]?
WH=NDIR 3-think$_{AI}$-N Cora **WH** IC.away-go$_{AI}$-OBV-3CJ
'Where does Cora think he went?' (GP, DT 2023.01.25;NR)

c. **Tayuwe** kt-itomu-p-s [**tayuwe** kt-oli-Ø malsanikuwam-ok]?
when 2-say$_{AI}$-P-DUB **when** 2-there-go$_{AI}$ store-LOC
'When did you say you're going to go to the store?' (Bruening 2006: 26)

d. **Wen** Mali wewitaham-a-c-il [**wen** kisi= nisu-kam-uk]?
who Mary IC.remember$_{TA}$-3OBJ-3CJ-OBV.SG **who** IC.PFV= two-dance.with$_{TA}$-1SG:3CJ
'Who does Mary remember I danced with?' (Bruening 2006: 28)

I don't examine this particular *wh* question strategy here. See Bruening (2001b: §4.4.6, 2004, 2006) for discussion.

An alternative long-distance *wh* question formation strategy is *wh*-scope marking, where the *wh* phrase only moves to the edge of the embedded clause, and the *wh* item *keq(sey)* 'what' is used to mark the higher scope of the question:

(200) a. **Keq** itom-Ø [**weni-l** nemiy-a-c-il]?
what say$_{\text{AI}}$-3 **who-OBV.SG** IC.see$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
'Who did he say he saw?' (Bruening 2004: 230)

b. **Keq** Mihku ikonewato-k [**weni-l** kisi= komutonom-a-c-il]?
what Mihku IC.deny$_{\text{TI}}$-3CJ **who-OBV.SG** IC.PFV= rob$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
'Who did Mihku deny that he robbed?' (Bruening 2004: 252)

c. **Keq** Roger itom-Ø [**tayuwek** koti= peci-ye-Ø]?
What Roger say$_{\text{AI}}$-3 **where** going.to= arrive-go$_{\text{AI}}$-3
'When did Roger say he was going to arrive?' (MA 2023.06.20)

d. **Keq** kecicihtuw-ek [**tama** elomi-ya-t]?
what IC.know$_{\text{TI}}$-1PL.CJ **where** IC.away-go$_{\text{AI}}$-3CJ
'Where do we know he went?' (MA 2023.06.20)

Bruening (2001b: Chapter 4, 2004, 2006) argues extensively that Dayal's (1994) INDIRECT DEPENDENCY analysis of *wh*-scope marking correctly captures the properties of Passamaquoddy *wh*-scope marking. Under this analysis, there are two distinct *wh* dependencies involved in *wh*-scope marking, a lower one and a higher one. Thus, a sentence like (200a) receives the following schematic analysis:

(201) **Keq** itom-Ø *t* [**weni-l** nemiy-a-c-il *t*]?
what say$_{\text{AI}}$-3 **who-OBV.SG** IC.see$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
'Who did he say he saw?' (Bruening 2004: 230)

Here, the embedded *wh* phrase *wenil* 'who.OBV.SG' moves to embedded Spec,CP, and then stops there. Separately, *keq* 'what' in the matrix clause moves to matrix Spec,CP, marking the scope of the *wh* question (see Dayal 1994 and Bruening 2001b, 2004, 2006 for more details).

As we'll see, *wh* questions come in multiple clause types (specifically, I'll argue, only independent and conjunct). Relative clauses of all types, on the other hand, are always conjunct. It's possible to relativize a large number of positions on Keenan and Comrie's (1977) Accessibility Hierarchy—for instance, external arguments (198b-c), direct objects (198a), indirect objects (202a), possessors (202b), locative adjuncts (202c), among others.

(202) a. N-kis-ewestuwam-a-k [**wasis-ok** Laca kisi= mil-a-t
1-PFV-talk.to$_{\text{TA}}$-3OBJ-PROX.PL **kid-PROX.PL** Roger IC.PFV= give$_{\text{TA+O}}$-3OBJ
cikoni-hi].
apple-OBV.PL
'I talked to the **kids** that Roger gave apples to.' (GP, MA 2022.11.16)

b. Wot not [**skitap** '-temis-ol kis-som-uk].
this.PROX.SG that.PROX.SG **man** 3-dog-OBV.SG IC.PFV-feed$_{\text{TA}}$-1SG:3CJ
'This is the **man** whose dog I fed.' (EM 2022.11.23)

c. Ikolisoman komici-hkosu-Ø [**skicinuwihku-k** etoli= skat pawalqosi-h-q].
Englishman obstruct-build.house$_{\text{AI}}$-3 **Indian.land-LOC** IC.there= NEG be.wanted$_{\text{AI}}$-NEG-3CJ
'The Englishman built a house on **Indian land**, where he was not wanted.'
https://pmportal.org/dictionary/komicihkosu

Note especially that the locative relative clause (202c) is conjunct, in contrast to *tama* 'where' questions which are independent.

Additionally, just like *wh* movement, relativization is possible long-distance:

(203) a. Nihtol nit [**pahtoliyas-ol** Petak ikonewato-k [eli kisi= komutonom-a-t ⟨pahtoliyasol⟩]].
that.OBV.SG that.IN.SG **priest-OBV.SG** Petak IC.deny$_{\text{TI}}$-3CJ IC.C PFV= rob$_{\text{TA}}$-3OBJ-3CJ
'That's the **priest** that Petak denied that he robbed.' (Bruening 2001b: 245)

b. Woli-hpuksu-Ø-wok [**minsoss-ok** Piyel kisi= wicuhkem-i-t [Ø-mokon-a-n ⟨minsossok⟩]].
good-taste$_{\text{AI}}$-3-PROX.PL **raspberry-PROX.PL** Peter IC.PFV= help$_{\text{TA}}$-1OBJ-CJ 3-pick$_{\text{TA}}$-3OBJ-N
'The **raspberries** Peter helped me pick are tasty.' (EM 2023.01.22;NR)

In general, *wh* movement and relativization are subject to the same restrictions (with one notable exception being that the complement of *ikonewatomon* 'deny' seems to be an island for *wh* movement but not (externally-headed) relative clauses, Bruening 2001b: 245). I refer the interested reader to Bruening (2001b) for more details.

Passamaquoddy allows both externally-headed as well as internally-headed relative clauses. All the examples we've seen so far are externally-headed (impressionistically, externally-headed relative clauses are more common). Below I provide some examples of clearly internally-headed relative clauses:

(204) a. [Kisi= pkon-a-c-i **pskihqimins-`** Roger] piyemi= woli-naqsu-Ø-wok.
IC.PFV= pick$_{\text{TA}}$-3OBJ-3CJ-OBV.PL **strawberry-OBV.PL** Roger more= good-look$_{\text{AI}}$-3-PROX.PL
'The **strawberries** Roger picked look better.' (EM 2022.10.26;GR)

b. Wen kis-ankum-ot [Piyel **tuwihput** kisihta-q]?
who IC.PFV-sell$_{\text{TA+O}}$-2SG:3CJ Peter **table** IC.make$_{\text{TI}}$-3CJ
'Who did you sell the **table** Peter made to?' (Bruening 2001b: 229)

c. [Wolaku **skitap** nemiy-uk] mace-he-Ø sepawonu.
yesterday **man** IC.see$_{TA}$-1SG:3CJ leave-go$_{AI}$-3 tomorrow
'The **man** that I saw yesterday is leaving tomorrow.' (Reintges et al. 2006: 173)

In all of these cases, the relative head is both preceded and followed by relative-clause-internal material, forcing an internally-headed parse. However, a relative head can also appear fully preceding the relative clause (205a) as well as fully following it (205b), in which case it's unclear whether we have an external or an internal head:

(205) a. [**Wasis-ok** Roger kis-okehkim-a-t] 'tawi=
child-PROX.PL Roger IC.PFV-teach$_{TA}$-3OBJ-3CJ know.how=
skicinu-watuwa-htu-Ø-wok.
Indian-speak$_{AI}$-PL-3-PROX.PL

b. [Roger kis-okehkim-a-t **wasis-`**] 'tawi=
Roger IC.PFV-teach$_{TA}$-3OBJ-3CJ **child-OBV.PL** know.how=
skicinu-watuwa-htu-Ø-wok.
Indian-speak$_{AI}$-PL-3-PROX.PL
Both: 'The **children** Roger taught can speak Passamaquoddy.' (EM 2022.10.26)

Bruening (2001b) and Reintges et al. (2006) both argue that right-peripheral relative heads, as in (205b), are always internal heads. It's unclear whether left-peripheral relative heads, as in (205a), *must* be external heads, or whether they're ambiguous. I won't provide an answer to this particular question here.

Finally, Passamaquoddy also allows for headless relative clauses, which are formed exactly the same as headed relative clauses, just without an overt head:

(206) a. [Wasis-ok nut-okehkim-ku-hti-t] li-wisu-Ø Roger.
child-PROX.PL IC.as.job-teach$_{TA}$-INV-3PL-3CJ thus-name$_{AI}$-3 Roger
'The children's teacher is named Roger.' (lit. 'The person the children are taught by is named Roger') (EM 2022.10.26)

b. Laca Ø-wolasihkuw-a-` [peci-ya-woloti-hti-t].
Roger 3-greet$_{TA}$-3OBJ-OBV.PL IC.arrive-go$_{AI}$-PL-3PL-3CJ
'Roger greeted the people that arrived.' (EM 2022.10.26;GR)

c. N-koskahtu-n nt-ahsosuwon qihiw [Roger wiki-t].
1-lose$_{TA}$-N 1-hat near Roger IC.live$_{AI}$-3CJ
'I lost my hat near where Roger lives.' (EM 2023.01.04)

Like headed relatives, these are also conjunct.

With this background on a few kinds of Ā extraction out of the way, let's move on to examining how independent, conjunct, and subordinative clauses interact with Ā movement. As we'll see, both independent and conjunct clauses can be final landing sites of Ā movement, but subordinative clauses cannot.

5.1.1 Independent

Here are two kinds of *wh* questions that are reliably independent: *tama* 'where' questions and *tayuwe(k)* 'when' questions.[3]

(207) *Tama* 'where' with independent

a. **Tama** olomi-ye-Ø Roger?
where away-go$_{AI}$-3 Roger
'Where is Roger going?' (GP 2021.04.05)

b. **Tama** wiku-Ø Roger?
where live$_{AI}$-3 Roger
'Where does Roger live?' (EM 2022.12.21)

(208) *Tayuwe(k)* 'when' with independent

a. **Tayuwek** cel k-naci= pkon-a-k pskihqimins-ok?
when even 2-go= pick$_{TA}$-3OBJ-PROX.PL strawberry-PROX.PL
'When are you going to go pick strawberries?' (GP 2023.04.18)

b. **Tayuwek** cel apaci-ye-Ø?
when even return-go$_{AI}$-3
'When did he come back?' (EM 2022.12.07)

Given our background claim that *wh* items move to Spec,CP, this immediately confirms for us that independent clauses contain CP layers.

[3] The dictionary (Francis and Leavitt 2008) reports a semantic difference between *tayuwe* and *tayuwek*, which is that *tayuwe* (without final /k/) is used for questions about the past and *tayuwek* (with final /k/) is used for questions about the future. For our consultants, there doesn't seem to be any clear semantic difference between the two at all: both can be used for both past and future 'when' questions:

(i) Past *tayuwe(k)* 'when' questions

a. **Tayuwek** kt-oli-Ø Kehlis-k?
when 2-there-go$_{AI}$ Calais-LOC
'When did you go to Calais?' (GP, DT 2023.01.25)

b. **Tayuwe** k-nomihqosi-p-s?
when 2-be.born$_{AI}$-P-DUB
'When were you born?' (MA 2023.05.23)

(ii) Future *tayuwe(k)* 'when' questions

a. **Tayuwek**=c k-sukolopan-k
when=FUT 2-cake-make$_{AI}$
'When will you make a cake?' (EM 2022.12.07)

b. **Tayuwe** mace-he-Ø?
when away-go$_{AI}$-3
'When is he leaving?' (MA 2023.02.21)

There are two additional points worth noting. The first is that you can occasionally find a matrix *tama* 'where' or *tayuwe(k)* 'when' question in the conjunct, as in the following examples (though independent is the most common option):

(209) *Tama* 'where' with conjunct

a. **Tama** etoli= pskuw-a-t Tigaw-ol?
where IC.there= find$_{\text{TA}}$-3OBJ-3CJ Tiger-OBV.SG
'Where did she find Tiger?' (GP, MA 2023.02.07;NR)

b. **Tama** kisi= kal-a-t?
where IC.PFV= hide$_{\text{TA}}$-3OBJ-3CJ
'Where did he hide it [the frybread]?' (MA 2023.06.20)

(210) *Tayuwe(k)* 'when' with conjunct

a. **Tayuwek** nekom peci-ya-t-s?
when 3SG IC.come-go$_{\text{AI}}$-3CJ-DUB
'When did he get here?' (GP, MA 2023.02.07;NR)

b. **Tayuwe** wasis kisi= wihqon-a-t tumahsis-ol?
when kid IC.PFV= take$_{\text{TA}}$-3OBJ-3CJ frybread-OBV.SG
'When did the kid take the frybread?' (MA 2023.06.20)

I assume that these exceptional conjunct *tama* 'where' and *tayuwe(k)* 'when' questions are actually clefts, as conjunct is also found in relative clauses. The structure of these questions would thus be *tama*/*tayuwe(k)* plus a null copula (Passamaquoddy lacks obligatory overt copulas) plus a headless relative. It remains to be seen whether this is a correct assessment—I leave this issue aside for further research.

The second additional point is that it's perhaps best to analyze these "independent-selecting" *wh* questions as *default*/not caring about clause type, rather than truly independent-selecting. Suggestive evidence for this comes from embedded *tama* 'where' and *tayuwe(k)* 'when' questions under typically conjunct-selecting predicates, where these questions can become conjunct:

(211) Embedded *tama* 'where' with conjunct

a. N-kisi= wonitahas-ulti-ne-n [$_{\text{CJ}}$ **tama** ehcuwi= l-apasi-yeq].
1-PFV= forget$_{\text{AI+O}}$-PL-N-1PL **where** IC.must= there-go.together$_{\text{AI}}$-1PL.CJ
'We forget where we had to go.' (EM 2023.01.22)

b. Cora Ø-mihqitahasi-n [$_{\text{CJ}}$ **tama** kisi= puno-k sisqeya-l].
Cora 3-remember$_{\text{AI}}$-N **where** IC.PFV= put$_{\text{TI}}$-3CJ glasses-IN.PL
'Cora forget where she put her glasses.' (GP 2023.04.25;NR)

(212) Embedded *tayuwe(k)* 'when' with conjunct

a. N-unitahasi-n [$_{\text{CJ}}$ **tayuwek** ehcuwi= oli-ya-yan-s Kehlis-k].
1-forget$_{\text{AI+O}}$-N **when** IC.must= there-go$_{\text{AI}}$-1SG.CJ-DUB Calais-LOC
'I forgot when I had to go to Calais.' (GP, DT 2023.01.25)

b. N-wewitahatom-on [$_{\text{CJ}}$ **tayuwe** ehcuwi= naci= pkon-uk pskihqimins-ok].
1-remember$_{\text{TI}}$-N **when** IC.must= go= pick$_{\text{TA}}$-1SG:3CJ strawberry-PROX.PL
'I remembered when I should go pick strawberries.' (GP 2023.04.18)

Of course, these embedded conjunct *tama* 'where' and *tayuwe(k)* 'when' questions could also be clefts. But, at least impressionistically, the conjunct version of these questions is more common under conjunct-embedding verbs than it is as a matrix *wh* question (independent is also possible under conjunct-selecting verbs), and thus there seems to be a qualitative difference between the two cases. Pending further investigation, I suggest that the common appearance of conjunct *tama* 'where' and *tayuwe(k)* 'when' questions under these verbs indicates that *tama* 'where' and *tayuwe(k)* 'when' do not actually trigger any specific clause type, but rather are happy to appear with whatever clause type is handed to them by the syntactic context. In matrix clauses this is independent, and under conjunct-preferring attitude predicates this is conjunct (or independent).

Finally, there are a few predicates—namely *luhke* 'do, work', *liwisu* 'be named', *itom* 'say', and *litahasu* 'think' (and their derivatives)—which are independent when their objects are *wh* questioned. Notably, the *wh* item used in these questions is *keq(sey)* 'what'[4] (which, as we'll see later, usually results in conjunct questions):

(213) a. **Keq** toli= ol-luhke-Ø Roger?
what PROG= thus-do$_{\text{AI}}$-3 Roger
'What is Roger doing?' (EM 2021.03.01)

b. **Keq** kt-amalhi= li-wis?
what 2-fancy= thus-be.named$_{\text{AI}}$
'What's your nickname?' (MA 2023.02.21;NR)

c. **Keqsey** itom-Ø?
what say$_{\text{AI}}$-3
'What did she say?' (GP 2023.01.30;NR)

d. **Keqsey** kil kt-olitahas?
what 2SG 2-think$_{\text{AI}}$
'What do you think?' (GP 2020.10.06;NR)

One interesting connection between all of these predicates is that they are all morphologically intransitive—they are AI and do not agree with their objects (unlike AI+O verbs).

[4]For some speakers, *tan* is the *wh* item used to question the object of *luhke* 'do, work' (with "fake subordinative"—see Section 5.1.3, which argues that these apparent subordinative questions are actually independent):

(i) a. Nita, **tan** cel n-cuwi= ol-luhka-n toke?
well.then **WH** even 1-should= thus-do$_{\text{AI}}$-N now
'Uh-oh! What should I do now?' https://pmportal.org/dictionary/kisuwinalal

b. **Tan**=op kil kt-ol-luhka-n tokec ckuwi= mota-ha-t ya malsom?
WH=CF 2SG 2-thus-do$_{\text{AI}}$-N now to.here= heard-go$_{\text{AI}}$-3CJ HES wolf
'What would you do if a wolf were heard coming this way?' https://pmportal.org/dictionary/malsom

Our consultants generally use *keq* 'what' for these questions. I suspect that this is a diachronic change, though this conjecture bears further investigation.

However, that can't be the full generalization for why these particular predicates result in independent questions. This is because there are other predicates which seem to take objects without agreeing with them (or having the right finals for them), and yet we get *conjunct* questions when *wh*-questioning these unindexed objects. Two such verbs are *'tutoma* 'beg', which is AI and yet can take an object, and *'somal* 'feed', which is TA and yet can take two objects (the theme, what is fed, is not marked on the verb). These predicates must become conjunct when *wh*-questioning the unindexed object:

(214) *'tutoma* 'beg'

a. Wini yali= 'tutoma-Ø micuwakon. — Independent, declarative
Winnie around= beg$_{AI}$-3 food
'Winnie is begging for food.' (MA 2023.02.21)

b. **Keq** yali= 'tutoma-t Wini? — Conjunct, *wh*
what IC.around= beg$_{AI}$-3CJ Winnie
'What is Winnie begging for?' (MA 2023.02.21)

c. ***Keq** yali= 'tutoma-Ø Wini? — *Independent, *wh*
what around= beg$_{AI}$-3 Winnie
Intended: 'What is Winnie begging for?' (MA 2023.02.21)

(215) *'somal* 'feed'

a. Roger '-kis-som-a-` '-temis-` skonis-ol. — Independent, declarative
Roger 3-PFV-feed$_{TA}$-3OBJ-OBV.PL 3-dog-OBV.PL bone-IN.PL
'Roger fed his dogs bones.' (EM 2023.02.28)

b. **Keq** Roger kis-som-a-t '-temis-`? — Conjunct, *wh*
what Roger IC.PFV-feed$_{TA}$-3OBJ-3CJ 3-dog-OBV.PL
'What did Roger feed his dogs?' (EM 2023.02.28)

c. ***Keq** Roger '-kis-som-a-` '-temis-`? — *Independent, *wh*
what Roger 3-PFV-feed$_{TA}$-3OBJ-OBV.PL 3-dog-OBV.PL
Intended: 'What did Roger feed his dogs?' (EM 2023.02.28)

Strikingly, as evidenced by the (c) examples, these particular *wh* questions *cannot* be independent, unlike the former questions with *luhke* 'do, work', *liwisu* 'be named', *itom* 'say' and *litahasu* 'think'. I leave it for further research to determine the ultimate source of the independent-conjunct distinction in *wh* questions. For our purposes, it suffices that some *wh* questions are independent, which indicates that independent clauses are CP-sized.

Turning now to long distance *wh* questions, we can note that both plain long-distance *wh* movement as well as *wh*-scope marking are possible out of independent complements:

(216) Plain long-distance *wh* movement out of independent

a. **Tama** litahasu-Ø Piyel [$_{IND}$ Ø-nomiy-a-l mus-ol]?
where think$_{AI}$-3 Peter 3-see$_{TA}$-3OBJ-OBV.SG moose-OBV.SG
'Where did Peter think he saw a moose?' (MA 2023.06.20)

b. **Tayuwek** kt-olitahas [$_{\text{IND}}$ Laca olomi-ye-Ø]?
when 2-think$_{\text{AI}}$ Roger away-go$_{\text{AI}}$-3
'When do you think Roger left?' (MA 2023.06.20)

(217) *Wh*-scope marking out of independent

a. **Keq** kt-itom [$_{\text{IND}}$ **tama** kt-oli= nomiy-a 'Tolitoli]?
what 2-say$_{\text{AI}}$ **where** 2-there= see$_{\text{TA}}$-3OBJ Tolitoli
'Where did you say you're meeting Tolitoli?' (Bruening 2001b: 199)

b. **Keq** kt-itomu-p-s [$_{\text{IND}}$ **tayuwe** apc kt-oli-Ø malsanikuwam-ok]?
what 2-say$_{\text{AI}}$-P-DUB **when** again 2-there-go$_{\text{AI}}$ store-LOC
'When did you say you're going to go to the store?' (Bruening 2006: 26)

Until we have a tool to diagnose intermediate copies of long-distance Ā movement (which we'll develop in Sections 5.2 and 5.3), the plain *wh* movement possibility doesn't tell us much about how big independent clauses are, as in principle the *wh* items could have directly moved into the matrix clause. However, the *wh*-scope marking sentences in (217) tell us more, as the lower *wh* item moves to and stops at embedded Spec,CP (Bruening 2001b, 2004, 2006)—thus, *wh*-scope marking serves as yet another confirmation that independent clauses contain a CP layer.

5.1.2 Conjunct

The remainder of *wh* questions (except for *tan* 'how' questions, which we'll address in the next section) are all conjunct. These are *wen* 'who' and *keq(sey)* 'what' questions (except for those limited exceptions mentioned in the previous section), and *(keq) mehsi* and *keq weci* 'why' questions (*mehsi* is a preverb only found in 'why' questions, occasionallly appearing without *keq*, and *weci* is the changed form of the preverb *'ci* 'from, for'):

(218) *Wen* 'who' with conjunct

a. **Wen** piyemi= wik-ahtom-uw-ot '-sukolopan-om-ol?
who IC.more= enjoy-eat$_{\text{TI}}$-APPL-2SG:3CJ 3-cake-POSS-OBV.SG
'Whose cake did you like the best?' (GP, MA 2022.11.30)

b. **Wen** mete-htihike-t?
who IC.heard-hit$_{\text{AI}}$-3CJ
'Who's knocking?' (EM 2022.10.12)

(219) *Keq(sey)* 'what' with conjunct

a. **Keq** nemihtu-won qocomok?
what IC.see$_{\text{TI}}$-2SG.CJ outside
'What did you see outside?' (EM, RP 2021.09.15)

b. **Keqsey** kis-akonutom-a-s-k k-uhkomoss?
what IC.PFV-tell.story$_{\text{TI}}$-APPL-2OBJ-3CJ 2-grandmother
'What stories did your grandmother tell you?' (GP, MA 2022.11.30)

(220) *(Keq) mehsi* and *keq weci* ‘why’ with conjunct

a. **Keq mehsi** spote-qsi-t Mehqi-htuwa-t?
what IC.why day-sleep$_{\text{AI}}$-3CJ IC.red-have.beard$_{\text{AI}}$-3CJ
‘Why is Norvin sleeping during the day?’ (RP 2021.03.01)

b. **Mehs**-elomi-t?
IC.why-laugh$_{\text{AI}}$-3CJ
‘Why did he laugh?’ (MA 2023.02.21;NR)

c. **Keq weci** skat oli-ya-w-on?
what IC.from NEG there-go$_{\text{AI}}$-NEG-2SG.CJ
‘Why aren’t you going?’ https://pmportal.org/dictionary/keq-weci

In addition to these *wen* ‘who’, *keq* ‘what’, and *keq mehsi/weci* ‘why’ questions, questions using the general *wh* item *tan* when it is a locative relative root complement[5] are also conjunct:

(221) a. **Tan** eloqi-ya-t Piyel?
WH IC.direction-go$_{\text{AI}}$-3CJ Peter
‘Where did Peter go?’ (GP, DT 2023.01.25)

b. **Tan** eloq-ehtu-won?
WH IC.direction-do$_{\text{TI}}$-2SG.CJ
‘What did you do with it?’ (EM 2023.02.28;NR)

c. **Tan** wet-onom-on mahsusi-yil?
WH IC.from-by.hand$_{\text{TA}}$-2SG.CJ fiddlehead-IN.PL
‘Where did you get the fiddleheads?’ (EM 2023.04.11;NR)

I do not have much to say about why these particular kinds of questions are conjunct, whereas others are independent/default. However, the fact that there *are* conjunct *wh* questions indicates that conjunct clauses are large enough to host *wh* movement—that is, that they are CP-sized.

Another kind of *wh* question that is reliably conjunct are *tan* ‘which’ questions:

(222) a. **Tan** wot otuhk kil nehpoh-ot?
WH this.PROX.SG deer 2SG IC.kill$_{\text{TA}}$-2SG:3CJ
‘Which deer did you kill?’ (RP 2020.06.17;TB)

b. **Tan** wot espons nemiy-ot?
WH this.PROX.SG raccoon IC.see$_{\text{TA}}$-2SG:3CJ
‘Which raccoon did you see?’ (GP 2020.12.08;CD)

[5]Recall from Section 2.2.2 that relative roots are a closed class of preverbs and initials that add an oblique argument, like *(o)li-* ‘thus, in X way, to there’, *(wo)ci-* ‘from X’, *oloqi-* ‘in X direction’, *kehsu-* ‘X many, X much’, etc. The relative root complement is the constituent that is associated with the relative root, saturating its open argument slot.

However, these always contain a demonstrative right after the *tan*, and demonstratives seem to often be used as copulas in Passamaquoddy (a kind of pronominal copula):[6]

(224) Demonstratives as copulas

a. Nama, niktok **nit** n-temis-ok.
no that.PROX.PL **that.IN.SG** 1-dog-PROX.PL
'No, those are my dogs.' (GP 2021.03.22;EN)

b. Paspiposqonac-ik **niktok** kuhusu-wok?
buffalo-PROX.PL **that.PROX.PL** cow-PROX.PL
'Are buffaloes cows?' (GP 2021.11.10;YG)

Interestingly, in (224a) the demonstrative copula is in its default inanimate singular form, whereas in (224b) it agrees with the subject *paspiposqonacik* 'buffalo.PROX.PL'.

It seems reasonable then to assume that *tan* 'which' questions are actually all clefts, i.e. 'which is the one that…' (see also Bruening 2001b: 155; see Blain 1997 for a Plains Cree parallel). If so, then we don't learn anything new about the independent/conjunct distinction with *wh* questions, as these *wh* questions would be conjunct because, being clefts, they contain relative clauses.

Turning now to long-distance *wh* questions, just like with independent clauses, conjunct clauses allow both plain long-distance *wh* movement as well as *wh*-scope marking out of them:

(225) Plain long-distance *wh* movement out of conjunct

a. **Tama** 't-otoli= wewitahatom-on [$_{\text{CJ}}$ eli cuwi= oli-ya-t]?
Where 3-there= remember$_{\text{TI}}$-N IC.C must= there-go$_{\text{AI}}$-3CJ
'Where did she remember she had to go?' (GP, MA 2023.05.02;NR)

b. **Weni-l** itom-Ø [$_{\text{CJ}}$ nemiy-a-c-il]?
who-OBV.SG say$_{\text{AI}}$-3 IC.see$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
'Who did he say he saw?' (Bruening 2004: 230)

(226) *Wh*-scope marking out of conjunct

a. **Keq** Tihtiyas wewitahato-k [$_{\text{CJ}}$ **weni-l** ehcuwi= mattoktehmuw-a-t]?
what Tihtiyas IC.remember$_{\text{TI}}$-3CJ **who-OBV.SG** IC.must= call$_{\text{TA}}$-3OBJ-3CJ
'Who did Tihtiyas remember she had to call?' (EM 2023.01.04;NR)

[6] Not all copular sentences contain a demonstrative copula—we can also have a null copula:

(223) a. Sapet naka Tihtiyas taktal-ok.
Elizabeth and Tihtiyas doctor-PROX.PL
'Elizabeth and Tihtiyas are doctors.' (GP 2021.11.10;YG)

b. Sesomitahasu-Ø weni-k kiluwaw.
wonder$_{\text{AI}}$-3 who-PROX.PL 2PL
'He wonders who y'all are.' (GP 2023.01.24)

I do not know if there's a syntactic or semantic difference between demonstrative-full versus demonstrative-less copular sentences.

b. **Keq** itom-Ø [$_{\text{CJ}}$ **weni-l** nemiy-a-c-il]?
what say$_{\text{AI}}$-3 **who-OBV.SG** IC.see$_{\text{TA}}$-3OBJ-3CJ-OBV.SG
'Who did he say he saw?' (Bruening 2004: 230)

Again, we can conclude from these examples (especially from the *wh*-scope marking examples) that conjunct clauses also have a CP layer.

Recall that I suggested that "independent-selecting" *wh* questions were actually just *wh* questions that accept any kind of clause type. In contrast, conjunct-selecting *wh* questions really are conjunct-selecting. To see this, let's take a look at conjunct-selecting *wh* questions embedded under verbs that preferentially embed independent clauses, like *itom* 'say':

(227) a. Ma=te itom-u-Ø [$_{\text{CJ}}$ **weni-l** etol-ewestuwam-a-t].
NEG=EMPH say$_{\text{AI}}$-NEG-3 **who-OBV.SG** IC.PROG-talk.to$_{\text{TA}}$-3OBJ-3CJ
'He didn't say who he was talking to.' (EM 2023.05.30;NR)

b. *Ma=te itom-u-Ø [$_{\text{IND}}$ **weni-l** 't-otol-ewestuwam-a-l].
NEG=EMPH say$_{\text{AI}}$-NEG-3 **who-OBV.SG** 3-PROG-talk.to$_{\text{TA}}$-3OBJ-OBV.SG
Intended: 'He didn't say who he was talking to.' (EM 2023.05.30;NR)

As we can see, in order to embed a *wen* 'who' question under *itom* 'say', which usually prefers independent complements, we actually need a conjunct verb (227a), and we cannot have independent (227b). So, conjunct-selecting *wh* questions really *do* care about what clause type they are, in contrast to "independent-selecting" questions.

More evidence to this effect comes from *wh*-scope marking. The verb *litahasu* 'think' preferentially embeds independent, and normally does not embed questions—but, if we do *wh*-scope marking, we can embed a *wh* question under it. Strikingly, under *wh*-scope marking, conjunct-selecting *wh* questions under *litahasu* 'think' force the embedded clause to be conjunct:

(228) a. **Keq** litahasu-Ø Tihtiyas [$_{\text{CJ}}$ **weni-l** ehcuwi= mattoktehmuw-a-t]?
what think$_{\text{AI}}$-3 Tihtiyas **who-OBV.SG** IC.must= call$_{\text{TA}}$-3OBJ-3CJ
'Who does Tihtiyas think she has to call?' (EM 2023.01.04;NR)

b. ***Keq** litahasu-Ø Tihtiyas [$_{\text{IND}}$ **weni-l** 't-ahcuwi= mattoktehmuw-a-l]?
what think$_{\text{AI}}$-3 Tihtiyas **who-OBV.SG** 3-must= call$_{\text{TA}}$-3OBJ-OBV.SG
Intended: 'Who does Tihtiyas think she has to call?' (EM 2023.01.04;NR)

The lower *wh* dependency with *wenil* 'who.OBV.SG' forces conjunct even under preferentially independent-embedding verbs. Again, conjunct-selecting questions really do select conjunct.

As we've seen in Section 4.2.2, conjunct also appears in other Ā extraction contexts. For instance, as I've described above, relative clauses of all types—externally-headed (229a), internally-headed (229b), and headless (229c)— are all conjunct:

(229) Relative clauses, conjunct

a. Piyel '-kis-onuw-a-l **sukolopan-ol** [$_{\text{CJ}}$ wik-ahp-ot].
Peter 3-PFV-buy$_{\text{TA}}$-3OBJ-OBV.SG **cake-OBV.SG** IC.like-eat$_{\text{TA}}$-2SG:3CJ
'Peter bought the **cake** that you like.' (GP, MA 2022.11.16)

b. Wen kis-ankum-ot [$_{\text{CJ}}$ Piyel **tuwihput** kisihta-q]?
who IC.PFV-sell$_{\text{TA+O}}$-2SG:3CJ Peter **table** IC.make$_{\text{TI}}$-3CJ
'Who did you sell the **table** Peter made to?' (Bruening 2001b: 229)

c. [$_{\text{CJ}}$ Wasis-ok nut-okehkim-ku-hti-t] li-wisu-Ø Roger.
child-PROX.PL IC.as.job-teach$_{\text{TA}}$-INV-3PL-3CJ thus-name$_{\text{AI}}$-3 Roger
'The children's teacher is named Roger.' (lit. 'The person the children are taught by is named Roger') (EM 2022.10.26)

Additionally, under the assumption that temporal adjuncts involve Ā extracting a temporal operator (Geis 1970, 1975, Larson 1987, Haegeman 2009, a.m.o.), we can also understand why we get conjunct in temporal adjuncts in Passamaquoddy—these are also Ā extraction contexts, something like headless relatives over times:

(230) a. Piyel peci-ye-Ø [$_{\text{CJ}}$ w-itapi-hi mehci= pehkihtahs-ulti-hti-t].
Peter arrive-go$_{\text{AI}}$-3 3-friend-OBV.PL IC.finish= clean$_{\text{AI}}$-PL-3PL-3CJ
'Peter arrived [after his friends cleaned].' (lit. 'Peter arrived [when his friends finished cleaning].') (GP, MA 2022.12.14)

b. Piyel peci-ye-Ø [$_{\text{CJ}}$ mesq w-itapi-hi pehkihtahs-ulti-hti-h-q].
Peter arrive-go$_{\text{AI}}$-3 not.yet 3-friend-OBV.PL IC.clean$_{\text{AI}}$-PL-3PL-NEG-3CJ
'Peter arrived [before his friends cleaned].' (lit. 'Peter arrived [when his friends hadn't cleaned yet].') (GP, MA 2022.12.14)

c. [$_{\text{CJ}}$ Etol-okil-uhti-hti-t olomuss-ok], on nt-aluw-uks-ulti-pon.
IC.PROG-bark$_{\text{AI}}$-PL-3PL-3CJ dog-PROX.PL then 1-fail-sleep$_{\text{AI}}$-PL-1PL
'[While the dogs were barking], we couldn't sleep.' (EM 2022.12.21)

Finally, we can also note that in clausal comparatives, the comparative standard is also conjunct. Again, we can understand this as a reflex of Ā movement to create a kind of headless relative—in this case, movement of a degree operator (Ross 1967, Chomsky 1977, von Stechow 1984, Heim 1985, Bruening 2006: §4.2, a.m.o.):

(231) a. Mali 't-aqami-htu-n-ol mahkut-ol katok [$_{\text{CJ}}$ nil eli= kiseltom-uw-uk
Mary 3-more-have$_{\text{TI}}$-N-IN.PL dress-IN.PL than 1SG IC.thus= let$_{\text{TI}}$-APPL-1SG.CJ
[$_{\text{SUB}}$ n-tus '-kehs-onuhm-on]].
1-daughter 3-many-buy$_{\text{TI}}$-N
'Mary has more dresses than [I would allow my daughter to buy].'
(Bruening 2006: 45)

b. N-koti= kceyawi= pson-a-k nil sikiliyem-ok katok [$_{\text{CJ}}$ nekom
1-going.to= many= catch$_{\text{TA}}$-3OBJ-PROX.PL 1SG cricket-PROX.PL than 3SG
eli= pson-a-t coqols-`].
IC.thus= catch$_{\text{TA}}$-3OBJ-3CJ frog-OBV.PL
'I'm going to catch more crickets than [he's going to catch frogs].'
(Bruening 2006: 46)

All in all, then there are a number of relative clause and relative clause-like constructions in Passamaquoddy which require the use of the conjunct (in fact, the only kind of Ā extraction that *fails* to be conjunct are certain *wh* questions). Under the assumption that these constructions involve Ā movement of a relative operator to Spec,CP, this is yet more evidence that conjunct clauses have a CP layer.

5.1.3 Subordinative

Independent and conjunct clauses very happily host Ā operations like *wh* movement and relativization. In contrast, I'll argue that subordinative clauses cannot. First we'll look at subordinative complements, where I'll examine certain predicates, like *unitahasin* 'forget', *wewitahatomon* 'remember', and *'kisitahatomon* 'decide', that can embed subordinative clauses as well as *wh* questions, and I argue that they cannot embed subordinative *wh* questions. Then we'll take a look at subordinative coordination, and I'll show that subordinative conjuncts cannot be *wh* questions. Finally, we'll examine a class of *wh* questions that appear with the *wh* item *tan* with a manner or degree interpretation. These *wh* questions are traditionally described as triggering subordinative verb forms (Sherwood 1986: 133–134, LeSourd 1993: 23, Bruening 2001b: 48, Francis and Leavitt 2008: 43), but I propose, following Goddard (2020), that they should instead be understood as independent verbs showing inanimate singular agreement with an oblique argument (the relative root complement).

Subordinative complements

Here, we focus on predicates like *unitahasin* 'forget', *wewitahatomon* 'remember', and *'kisitahatomon* 'decide', which can embed both subordinative as well as conjunct (occasionally also independent) clauses, with a difference in meaning (see Chapter 6 for more details). Importantly, when they take conjunct/independent complements, that complement can be a *wh* question:

(232) *Unitahasin* 'forget' embeds subordinatives and *wh* questions

a. Piyel '-kisi= wonitahasi-n [$_{\text{SUB}}$ 't-oliy-a-n sukolopan-ol]. Subordinative
   Peter 3-PFV= forget$_{\text{AI+O}}$-N 3-make$_{\text{TA}}$-3OBJ-N cake-OBV.SG
   'Peter forgot to make a cake.' (EM 2022.11.09)

b. Piyel '-kisi= wonitahasi-n [$_{\text{CJ}}$ **keq** ehcuwi= lihta-q]. *wh* Q
   Peter 3-PFV= forget$_{\text{AI+O}}$-N **what** IC.have.to= make$_{\text{TI}}$-3CJ
   'Peter forgot what he had to make.' (EM 2022.11.09)

(233) *Wewitahatomon* 'remember' embeds subordinatives and *wh* questions

a. Ø-Wewitahatom-on Tihtiyas [$_{\text{SUB}}$ Ø-mattoktehmuw-a-n Ø-muhsums-ol].
   3-remember$_{\text{TI}}$-N Tihtiyas 3-call$_{\text{TA}}$-3OBJ-N 3-grandfather-OBV.SG
   'Tihtiyas remembered to call her grandfather.' (EM 2023.01.04;NR) Subordinative

b. N-wewitahatom-on [$_{\text{CJ}}$ **tayuwe** ehcuwi= pkon-uk pskihqimins-ok].
   1-remember$_{\text{TI}}$-N **when** IC.should= pick$_{\text{TA}}$-1SG:3CJ strawberry-PROX.PL
   'I remembered when I should pick strawberries.' (GP 2023.04.18) *wh* Q

(234) *'Kisitahatomon* 'decide' embeds subordinatives and *wh* questions

a. Piyel '-kisitahatom-on [$_{\text{SUB}}$ 't-oliy-a-n sukolopan-ol]. — Subordinative
Peter 3-decide$_{\text{TI}}$-N 3-make$_{\text{TA}}$-3OBJ-N cake-OBV.SG
'Peter decided to make a cake.' (EM 2022.11.09)

b. Piyel '-kisitahatom-on [$_{\text{CJ}}$ **keq** ehcuwi= lihta-q]. — *wh* Q
Peter 3-decide$_{\text{TI}}$-N **what** IC.have.to= make$_{\text{TI}}$-3CJ
'Peter decided what he had to make.' (EM 2022.11.09)

In the examples above, the (a) example involves embedding a non-interrogative subordinative complement, and the (b) example involves embedding a *wh* question conjunct complement.

One might then wonder whether these predicates can embed subordinative *wh* questions. It seems like they cannot:

(235) a. ??N-kisi= wonitahas-ulti-ne-n [$_{\text{SUB}}$ **tayuwek** n-maciy-apasi-ne-n].
1-PFV= forget$_{\text{AI+O}}$-PL-N-1PL **when** 1-leave-go.together$_{\text{AI}}$-N-1PL
Intended: 'We forgot when to leave.' (EM 2023.01.22)

b. N-kisi= wonitahas-ulti-ne-n [$_{\text{IND}}$ **tayuwek** nt-ahcuwi= maciy-apasi-pon].
1-PFV= forget$_{\text{AI+O}}$-PL-N-1PL **when** 1-have.to= leave-go.together$_{\text{AI}}$-1PL
'We forgot when we had to go.' (EM 2023.01.22)

Example (235a) shows we can't combine a subordinative verb form with a *wh* question. To convey the same information, we must use an independent clause with an overt modal (like English infinitives, subordinative complements seem to contain covert modals), as in (235b).

Sometimes, speakers will provide sentences that look like a genuine subordinative question when asked to translate an English infinitivial question. However, as we'll see, these are the exceptions that prove the rule. Here are two examples:

(236) Exceptions??

a. Task: Translate 'Peter decided what to make'. (EM 2022.11.09)
Piyel '-kisitahatom-on [$_{\text{SUB}}$ **keq** 't-olihtu-n].
Peter 3-decide$_{\text{TI}}$-N **what** 3-make$_{\text{TI}}$-N

b. Task: Translate 'Peter forgot what to make'. (EM 2022.11.09)
Piyel '-kisi= wonitahasi-n [$_{\text{SUB}}$ **keq** 't-olihtu-n].
Peter 3-PFV= forget$_{\text{AI+O}}$-N **what** 3-make$_{\text{TI}}$-N

In these sentences, we have an embedded question that looks subordinative—what's going on here?[7] I claim that these are not genuine *wh* questions, but rather declaratives with quexistentials under their existential reading—that is, with *keq* meaning 'something' rather than 'what'.

[7]Strictly speaking, the TI verb form *'tolihtun* 'make' could either be independent or subordinative in these examples. However, given the interpretation of these sentences—translation equivalents of English embedded infinitival questions—there needs to be a covert modal in the embedded clause. As far as I am aware, independent clauses cannot contain the kind of covert modal we can get in subordinative clause (you'd need an overt root modal like *cuwi* 'should, have to' or *kisi* 'can' to get the same interpretation). These examples lack an overt modal in the complement clause, and thus there are not likely to be independent, but rather subordinative.

Striking evidence for this conclusion comes from the fact that, in these examples, you can move the quexistential around (recall that *wh* items must be left-peripheral), and speakers report that the modified sentences mean the same thing:

(237) a. Piyel ‘-kisitahatom-on [$_{SUB}$ **keq** ‘t-olihtu-n].
Peter 3-decide$_{TI}$-N **what** 3-make$_{TI}$-N

b. Piyel ‘-kisitahatom-on [$_{SUB}$ ‘t-olihtu-n **keq**].
Peter 3-decide$_{TI}$-N 3-make$_{TI}$-N **what**
Both: ‘Peter decided to make something.’ (EM 2022.11.09)
EM: “It’s the same thing”

(238) a. Piyel ‘-kisi= wonitahasi-n [$_{SUB}$ **keq** ‘t-olihtu-n].
Peter 3-PFV= forget$_{AI+O}$-N **what** 3-make$_{TI}$-N

b. Piyel ‘-kisi= wonitahasi-n [$_{SUB}$ ‘t-olihtu-n **keq**].
Peter 3-PFV= forget$_{AI+O}$-N 3-make$_{TI}$-N **what**
Both: ‘Peter forgot he was supposed to make something.’ (EM 2022.11.09)
EM: “Sounds like it means the same thing.”

These are thus the exceptions that prove the rule: the only time you can get what looks like a genuine subordinative *wh* question is when it’s actually a declarative subordinative clause with an existential quantifier that happens to appear at its left edge, due to the flexibility of Passamaquoddy word order. Crucially for the judgment in (235), the *wh* item *tayuwek* ‘when’ is *not* a quexistential (it and *tan* ‘how, what, where’ are the only non-quexistential *wh* items in Passamaquoddy). Thus, the unacceptability of (235a) is due to there being no alternative existential parse. The inability to have subordinative *wh* questions suggests that there either no trigger of *wh* movement in a subordinative clause, or no position for a *wh* item to move to—both conclusions that point to a lack of a CP layer in subordinative clauses, in contrast to independent and conjunct clauses.

Turning now to long-distance *wh* questions, we find an interesting state of affairs: plain long-distance *wh* movement is possible, but *wh* scope-marking is not:

(239) Plain long-distance *wh* movement out of subordinative possible

a. **Weni-l** cel Tihtiyas wewitahato-k [$_{SUB}$ Ø-mattoktehmuw-a-n]?
who-OBV.SG even Tihtiyas IC.remember$_{TI}$-3CJ 3-call$_{TA}$-3OBJ-N
‘Who did Tihtiyas remember to call?’ (EM 2023.01.04;NR)

b. **Tama** k-pawatom-a-ku-n ’Tolitoli [$_{SUB}$ kt-oli= nomiy-a-n]?
where 2-want$_{TI}$-APPL-INV-N Tolitoli 2-there= see$_{TA}$-3OBJ-N
‘Where does Tolitoli want you to meet her?’ (Bruening 2001b: 180)

c. **Weni-l** kiseht-uw-a-t Roger [$_{SUB}$ ’t-ol-ewestuwam-a-n]?
who-OBV.SG IC.make$_{TI}$-APPL-3OBJ-3CJ Roger 3-thus-talk.to$_{TA}$-3OBJ-N
‘Who did Roger make him talk to?’ (EM 2022.12.07)

(240) *Wh*-scope marking out of subordinative impossible[8]

a. ??**Keq** cel Tihtiyas wewitahato-k [$_{SUB}$ **weni-l** Ø-mattoktehmuw-a-n
What even Tihtiyas IC.remember$_{TI}$-3CJ **who-OBV.SG** 3-call$_{TA}$-3OBJ-N
]?
Intended: 'Who did Tihtiyas remember to call?' (EM 2023.01.04;NR)

b. ***Keq** pawatom-a-s-k 'Tolitoli [$_{SUB}$ **tama** kt-oli= nomiy-a-n]?
what IC.want$_{TI}$-APPL-2OBJ-3CJ Tolitoli **where** 2-there= see$_{TA}$-3OBJ-N
Intended: 'Where does Tolitoli want you to meet her?' (Bruening 2001b: 203)

c. ***Keqsey** kiseltom-uw-a-t '-tus-ol [$_{SUB}$ **weni-l**
what IC.let$_{TI}$-APPL-3OBJ-3CJ 3-daughter-OBV.SG **who-OBV.SG**
Ø-nomiy-a-n]?
3-see$_{TA}$-3OBJ-N
Intended: 'Who does he permit his daughter to see?' (Bruening 2001b: 251)

---

[8]For at least one speaker, Margaret Apt, who is Passamaquoddy, it seems like it *is* actually possible to have *wh*-scope marking out of subordinative clauses:

(i) a. **Keq** Gracie pawatom-uw-i-nokot [$_{SUB}$ **tama** n-punom-one-n samaqan]?
what Gracie IC.want$_{TI}$-APPL-1OBJ-3:1PL.CJ **where** 1-put$_{TI}$-N-1PL water
'Where does Gracie want us to put the water?' (MA 2023.06.20)

b. **Keq** k-muhsums pawatom-a-s-k [$_{SUB}$ **tayuwek** k-naci= wikuwamkom-a-n]?
what 2-grandfather IC.want$_{TI}$-APPL-2OBJ-3CJ **when** 2-go= visit$_{TA}$-3OBJ-N
'When does your grandfather want you to visit him?' (MA 2023.06.20)

Interestingly, she also seems to allow subordinative *wh* questions under subordinative coordination, which other speakers do not accept (as we'll discuss shortly):

(ii) a. [$_{IND}$ **Tayuwe** wasis '-kisi= wihqon-a-l tumahsis-ol] naka [$_{SUB}$ **tama** '-kisi=
when kid 3-PFV= take$_{TA}$-3OBJ-OBV.SG frybread-OBV.SG and **where** 3-PFV=
kal-a-n]?
hide$_{TA}$-3OBJ-N
'When did the kid take the frybread and where did he hide it?' (MA 2023.06.20)

b. [$_{IND}$ **Tama** koti= maqa-ha-n] naka [$_{SUB}$ **tayuwe** k-maca-ha-ne-n]?
where going.to= together-go$_{AI}$-N and **when** 2-leave-go$_{AI}$-N-1PL
'Where is there going to be a gathering and when are we leaving?' (MA 2023.06.20)

Thus, we could say that for her, subordinative clauses *do* actually have CP layers, in contrast to other speakers.
To prefigure some of the discussion from Sections 5.2 and 5.3, this would predict that she should have a free LDA pattern for LDA into subordinative clauses. However, this is not true—for her subordinative LDA is restricted to the embedded subject, just like for all other speakers:

(iii) a. Roger '-pawatom-uw-**a**-n [$_{SUB}$ Winiw-ol nt-ol-ahyem-ku-ne-n].
Roger 3-want$_{TI}$-APPL-**3OBJ**-N Winnie-OBV.SG 1-thus-play.with$_{TA}$-INV-N-1PL
'Roger wants Winnie to play with us.' (MA 2023.02.21)

b. *Roger **n**-pawatom-a-**ku**-ne-**n** [$_{SUB}$ nt-ol-ahyem-ku-ne-n Wini(w-ol)].
Roger **1**-want$_{TI}$-APPL-**INV**-N-**1PL** 1-thus-play.with$_{TA}$-INV-N-1PL Winnie(-OBV.SG)
Intended: 'Roger wants Winnie to play with us.' (MA 2023.02.21)

I'm not quite sure what to make of this entire constellation of facts. I leave more investigation of this, as well as the

What do we make of this? The *wh*-scope marking data indicates that subordinative clauses lack a CP layer, as there would be nowhere for the lower *wh* phrase to move to—this conclusion is exactly in line with the data from verbs like *unitahasin* 'forget' that we saw above (235). Going further, if *wh* items cannot move to the left periphery of a subordinative clause (since they lack a CP layer), then plain long-distance *wh* movement (239) must not be derived by moving the *wh* phrase through the left edge of the embedded subordinative clause—rather, the *wh* phrase must move directly into the matrix clause (either to matrix Spec,*v*P, if *v*P is a phase, or immediately to matrix Spec,CP). Thus, there must not be any successive-cyclic movement to the edge of a subordinative clause. In Section 5.3 I provide further arguments to support this conclusion.

To summarize: the evidence from subordinative questions, both local (impossible) and long-distance (plain *wh* movement possible, *wh*-scope marking impossible) leads us to conclude that subordinative clauses lack a CP layer. The restrictedness of Ā movement within and out of subordinative clauses contrasts greatly with the freeness of Ā movement with independent and conjunct clauses, which show ample evidence of CP layers.

At this point, I should discuss some contradictory data. For at least two speakers, Grace Paul and Dwayne Tomah, it does seem like subordinative *wh* questions are genuinely possible under these particular predicates:

(241) a. N-unitahasi-n [$_{\text{SUB}}$ **tayuwek** Ø-naci= Kehlis-uhka-n].
1-forget$_{\text{AI+O}}$-N when 1-go= Calais-do$_{\text{AI}}$-N
'I forgot when to go run errands in Calais.' (GP, DT 2023.01.25)

b. N-wewitahatom-on [$_{\text{SUB}}$ **tayuwek** Ø-naci= pkon-a-n pskihqimins-ok].
1-remember$_{\text{TI}}$-N **when** 1-go= pick$_{\text{TA}}$-3OBJ-N strawberry-PROX.PL
'I remember when (is the best time) to pick strawberries.' (GP 2023.04.18)

I do not know yet whether this is a point of idiolectal or dialectal variation. Grace Paul and Dwayne Tomah are both Passamaquoddy speakers, whereas Edwina Mitchell (the source of the earlier judgments) is a Wolastoqey speaker. Nor am I sure what to make of this point analytically—one option is that some speakers might be able to form *wh* questions by moving the *wh* item to some position lower than Spec,CP in certain cases (see Newman 2021b for a similar proposal). Another option is that for some speakers, subordinative clauses really are genuinely TPs, whereas for others they might be CPs. One last observation is that both of these sentences contain the preverb *naci* 'go to, come from'—it could be possible that some speakers have started to grammaticalize this as a kind of future-oriented modal (similar to English *going to*). If so, these questions could be plain independent questions with *naci* conveying the modal force found in the subordinative. In any event, as far as I am aware, speakers generally agree on the results of all the other diagnostics that we'll see below which also point to subordinative clauses lacking CP layers (modulo fn. 8). I leave further investigation of this point of variation to further research.

Subordinative coordination

Moving on to subordinative coordination, I'll show that subordinative conjuncts cannot be *wh* questions. To set things up, we can first notice that it's possible to coordinate two *wh* questions—

broader range of cross-speaker variation in subordinative clause size diagnostics, to future research.

in particular, two independent/default-triggering *wh* questions (with *tama* 'where' and *tayuwek* 'when'):

(242) a. [$_{IND}$ **Tayuwek** Roger olomi-ye-Ø-ss] naka [$_{IND}$ **tama** koti= li-ye-Ø]?
when Roger away-go$_{AI}$-3-DUB and **where** want= there-go$_{AI}$-3
'When did Roger leave and where does he want to go?' (EM 2023.05.30)

b. [$_{IND}$ **Tama** Norvin koti= li-ye-Ø] naka [$_{IND}$ **tayuwek**=oc pom-oka-Ø]?
where Norvin going.to= there-go$_{AI}$-3 and **when**=FUT along-dance$_{AI}$-3
'Where is Norvin going to go and when will he dance?' (EM 2023.05.30)

The second conjunct of these coordinations of *wh* questions is independent, just like the first conjunct. The choice of *tama* 'where' and *tayuwek* 'when' questions is relevant, because we want to avoid a state of affairs where we don't know whether a subordinative *wh* question is unacceptable because it's a subordinative *wh* question, or because that *wh* item triggers another kind of clause type (e.g. like *wen* 'who' always triggers conjunct). With *tama* 'when' and *tayuwek* 'when', which aren't as picky about the clause type they appear in, we have the best chance at getting a grammatical subordinative *wh* question.

Now, when we try to turn these into subordinative coordinations, by inflecting the verb in the second conjunct in the subordinative, the result is unacceptable:

(243) a. *[$_{IND}$ **Tayuwek** Roger olomi-ye-Ø-ss] naka [$_{SUB}$ **tama** '-koti= li-ya-n]?
when Roger away-go$_{AI}$-3-DUB and **where** 3-want= there-go$_{AI}$-N
Intended: 'When did Roger leave and where does he want to go?' (EM 2023.05.30)

b. *[$_{IND}$ **Tama** Norvin koti= li-ye-Ø] naka [$_{SUB}$ **tayuwek**=oc '-pom-oka-n]?
where Norvin going.to= there-go$_{AI}$-3 and **when**=FUT 3-along-dance$_{AI}$-N
Intended: 'Where is Norvin going to go and when will he dance?' (EM 2023.05.30)

Just like with subordinative complements, we can't have a subordinative *wh* question in a subordinative coordination. Again, this indicates that subordinative clauses lack a CP layer.

This isn't to say that subordinative clauses can't host *wh* items at all—that's not true. Indeed, it is in fact possible to ATB *wh*-move out of a subordinative coordination and to have that single *wh* item scope over both conjuncts:[9]

[9] It's interesting to note that in these examples the first conjunct is conjunct, as required by the *wen* 'who' and *keq* 'what' questions, and the second conjunct is free to be subordinative. More generally, in subordinative coordinations, the first conjunct shows all the relevant clause-typing morphology, and the second conjunct "inherits" those properties without the morphology associated with them. In some sense, this is a kind of Coordinate Structure Constraint violation—see Chapter 6 for more discussion of this issue.

(244) a. **Wen** [$_{CJ}$ *t* kis-onuw-a-t molaqs-ol] naka [$_{SUB}$ *t* '-kisi= sukolopan-ka-n] wolaku?
who IC.PFV-buy$_{TA}$-3OBJ-3CJ milk-OBV.SG and 3-PFV= cake-make$_{AI}$-N yesterday
'Who bought milk and made a cake yesterday?' (EM 2022.12.07)

b. **Keq** [$_{CJ}$ kis-onuhm-on *t*] naka [$_{SUB}$ kt-ol-aqosom-on *t*] wolaku?
what IC.PFV-buy$_{TI}$-2SG.CJ and 2-thus-cook$_{TI}$-N yesterday
'What did you buy and cook yesterday?' (EM 2022.12.07)

Thus, subordinative clauses *can* in fact host *wh* items—what they cannot allow is for *wh* items to move to their left periphery. Under my proposal, this is because they lack a left periphery (i.e. CP layer) altogether. In this respect, this data is exactly parallel to the possibility of long-distance *wh* movement out of subordinative complements.

An exception? "Fake subordinative"

There's a seeming exception to the generalization presented so far that subordinative clauses cannot host *wh* movement: there are certain *wh* questions, namely those featuring the *wh* item *tan* with a degree or manner interpretation, that involve a verb form that looks like a subordinative:

(245) *Tan* degree questions, subordinative?

a. **Tan** '-kehsi-ni-ya psuwis-ok?
WH 3-be.many$_{AI}$-N-PL cat-PROX.PL
'How many cats are there?' (GP, MA 2022.12.14)

b. **Tan** '-tuci= kakawi= qasqi-n?
WH 3-much= fast= run$_{AI}$-N
'How fast can he run?' (MA 2023.02.21)

c. **Tan** '-qon-askuwh-i-n?
WH 2-long-wait.for$_{TA}$-1OBJ-N
'How long have you been waiting for me?'
https://pmportal.org/dictionary/qonaskuwyal

(246) *Tan* manner questions, subordinative?

a. **Tan** kt-oli-y-a-n tumahsis?
how 2-thus-make$_{TA}$-3OBJ-N frybread
'How did you make the frybread?' (GP 2023.04.04;NR)

b. **Tan** nt-oli= kisi= ksoka-ssi-ne-n?
WH 1-thus= can= across-move$_{AI}$-N-1PL
'How can we get across?' https://pmportal.org/dictionary/kisi-ksokassu

c. **Tan**=oc kt-ol-kuw-i-ni-ya muh-ul-eq?
WH=FUT 2-thus-affect$_{TA}$-1OBJ-N-PL eat$_{TA}$-2OBJ-2PL.CJ
'How will you affect me if I eat you?'
https://pmportal.org/dictionary/kikcokkuwal

d. **Tan** '-toli-ki-n ahahs kis-onuw-ot?
WH 3-thus-look$_{AI}$-N horse IC.PFV-buy$_{TA}$-2SG:3CJ
'What kind of horse did you buy?' (lit. 'How does the horse that you bought look?')
https://pmportal.org/dictionary/liku

Note that in all of these cases *tan* is a relative root complement. In degree questions (245), it's the relative root complement of a degree-introducing relative root like *kehsi-* 'X many, X much (amount)', *tuci-* 'X much, to X extent', or *qoni-* 'X long (in time or space)'. In manner questions (246), it's the relative root complement of *oli-* 'thus, in X way'.[10]

The issue at hand is whether these are genuine instances of subordinative questions. In form, the verbs found in these questions look like subordinatives—however, there are several cases in which subordinative verb forms are the same as independent verb forms, as emphasized by Goddard (2020). In particular, Goddard (2020) points out that the same inflectional material found in the subordinative is also found in independent clauses where C (peripheral agreement) indexes an oblique (typically a relative root complement). Further, he proposes for Unami Delaware that the so-called "subordinative" verbs found in these kinds of 'how' questions are actually independent verbs where C has agreed with the oblique *wh* item. I'd like to follow Goddard and suggest the same for Passamaquoddy manner and degree *tan* questions.

I provide two arguments in support of the conclusion that manner and degree *tan* questions are actually independent and not subordinative. The first argument takes as its basis the observation that *tama* 'where' and *tayuwek* 'when' questions, which are usually independent as matrix *wh* questions, can be conjunct when embedded under conjunct-embedding verbs (Section 5.1.1), likely because these *wh* questions aren't strictly speaking "independent selecting", but rather use the *default* clause type in a given syntactic context. Strikingly, when we embed these "subordinative selecting" *tan* questions under conjunct-embedding verbs, they can optionally become conjunct, just like the *tama* 'where' and *tayuwek* 'when' questions discussed earlier:

[10]Interestingly, at least for manner *tan* questions, the relative root *oli-* is occasionally absent (though, impressionistically, this option seems less frequent):

(i) a. **Tan**=oc wen '-kisi= pkon-a-n?
WH=FUT who 3-can= pick$_{TA}$-3OBJ-N
'How can one choose [a mat]?' https://pmportal.org/dictionary/kassituhusut

b. Nita, **tan** toke '-kisi= ksoka-ssi-n?
look WH now 3-can= across-move$_{AI}$-N
'Uh-oh, now how can he get across?' https://pmportal.org/dictionary/ksokassu

(247) Conjunct *tan* degree and manner questions

a. Ma=te n-kocicihtu-w-on [$_{CJ}$ **tan** eli-ki-li-t weyossis-ol
NEG=EMPH 1-know$_{TI}$-NEG-N **WH** IC.thus-look$_{AI}$-OBV-3CJ animal-OBV.SG
eyw-a-t Piyel].
IC.have$_{TA}$-3OBJ-3CJ Peter
'I don't know what kind of animal Peter has.' (lit. 'I don't know how the animal that Peter has looks.') (GP 2020.12.08)

b. N-piluwitaham-a [$_{CJ}$ **tan** etuci= kakawi-ya-t Norvin atomupil-ok].
1-think.differently$_{TA}$-3OBJ **WH** IC.much= fast-go$_{AI}$-3CJ Norvin car-LOC
'I changed my mind about how fast Norvin goes in a car.' (MA 2023.06.20)

c. Ma=te n-pehki= kcicihtu-w-on [$_{CJ}$ **tan** el-uwehkasi-k ponapsqeya-l].
NEG=EMPH 1-clean= know$_{TI}$-NEG-N **WH** IC.thus-be.used$_{II}$-CJ rock.fern-IN.PL
'I'm not exactly sure how rock fern is used.'
https://pmportal.org/dictionary/ponapsqey

d. ...naka kt-iy-uke-ne-n [$_{CJ}$ **tan** kilun ehcuwi= l-aws-ulti-yiq].
and 2-tell$_{TA}$-INV.X-N-1PL **WH** 21 IC.should= thus-live$_{AI}$-PL-21CJ
'...and we were told how we should live.' https://pmportal.org/dictionary/ksehewiw

If these kinds of *tan* questions really selected for subordinatives, then it's unclear why they can be conjunct in these examples. However, if they don't actually impose any restrictions on clause type (i.e. are independent/default selecting, like *tama* 'where' and *tayuwek* 'when'), then we can easily understand why they're able to be conjunct in conjunct-embedding contexts.

The second argument that these so-called "subordinative" questions aren't really subordinative comes from their behavior in *wh*-scope marking. These questions *are* able to participate in *wh*-scope marking, unlike typical subordinative complements:

(248) "Subordinative" *tan* *wh*-scope marking

a. **Keq** itom-Ø Pil [$_{SUB?}$ **tan** 't-oli= nat-ama-n]?
what say$_{AI}$-3 Bill **WH** 3-thus= go-fish$_{AI}$-N
'How did Bill say he was going fishing?' (Bruening 2004: 240)

b. **Keqsey** itom-Ø Pil [$_{SUB?}$ **tan** '-tuci-ya-n mutassaykol]?
what say$_{AI}$-3 Bill **WH** 3-much-go$_{AI}$-N motorcycle
'How fast did he say the motorcycle could go?' (Bruening 2001b: 199)

c. **Keq** kisi= yuh-us-k Meysis [$_{SUB?}$ **tan** 't-oli= tkiqol-on]?
what IC.PFV= tell$_{TA}$-2OBJ-3CJ Meysis **WH** 3-thus= be.heavy$_{AI}$-N
'How heavy did Meysis tell you she was?' (Bruening 2004: 254)

Given that these complements are able to participate in *wh*-scope marking, I conclude that they are not truly subordinative, but rather independent.

Therefore, while *tan* degree and manner questions look like they could be subordinative, the evidence from conjunct-embedding predicates and *wh*-scope marking indicates that they are actually independent, as these so-called "subordinative" *tan* questions show the same properties as independent *wh* questions. We thus have more concrete evidence from Passamaquoddy for Goddard's (2020) suggestion that these kind of "subordinative" contexts are actually independent, with the verbal morphology indicating agreement with an oblique argument (the relative root complement)—see Goddard (2020) for more details.

5.2 Long-distance agreement

The evidence from more straightforward instances of Ā extraction, like *wh* questions and relativization, tells us that independent and conjunct clauses are CP-sized whereas subordinative clauses are smaller. Here, we turn to a phenomenon that allows us to diagnose other kinds of Ā movement, even covert Ā movement—long-distance agreement (LDA). We'll see that using LDA as a diagnostic for Ā movement leads us to the same conclusions: independent/conjunct clauses are CPs, subordinative clauses are TPs.

The LDA constructions we'll be looking at involve an attitude verb showing object agreement with a constituent in its complement—long-distance object agreement.[11] In Passamaquoddy, LDA is restricted to a limited set of attitude predicates, but that set contains verbs that can embed all clause types: independent, conjunct, as well as subordinative. This includes epistemic predicates like *'kocicihtun* 'know' (*'kosicihtun* for some speakers), *'piluwitahatomon* 'suspect, think differently', *wewitahatomon* 'remember', *mihqitahatomon* 'recall', *unitahasin* 'forget', which can embed both independent and conjunct complements (though usually conjunct); emotive predicates like *wolitahatomon* 'be happy', *'palitahatomon* 'be proud', *'tassokitahatomon* 'be surprised', which mainly embed conjunct complements; (direct) perception predicates like *nutomon* 'hear' and *nomihtun* 'see', which embed conjunct; and subordinative-embedding predicates like *'pawatomon* 'want', *'kisehtun* 'make', *'kiseltomon* 'allow', *'kolahmon* 'forbid', *'piyemitahatomon* 'prefer', and *nokatomon* 'fear'. Here are a few examples of LDA into each clause type:

(249) LDA into independent clauses

a. Ma=te n-kocicihtu-w-on-**ol** [$_{\text{IND}}$ nute-sson-Ø-ul kosona tan].
NEG=EMPH 1-know$_{\text{TI}}$-NEG-N-**IN.PL** out-move$_{\text{II}}$-3-IN.PL or WH
'I don't know if <u>they</u> [the fiddleheads] are out or not.' (RP 2023.01.21)

b. Ma=te wen '-kociciy-**a**-wi-**hil** [$_{\text{IND}}$ tama l-ossin-Ø-ul].
NEG=EMPH who 3-know$_{\text{TA}}$-**3OBJ**-NEG-**OBV.SG** where there-lie$_{\text{AI}}$-3-OBV.SG
'No one knows where <u>he</u> [Laks] lies.' https://pmportal.org/dictionary/lamkomiqikan

[11] It's not clear to me whether there's long-distance subject agreement/raising to subject in Passamaquoddy. The only potential candidate I'm aware of is *nokosanaqsu* 'take a short time', which takes conjunct complements and shows subject agreement with the embedded subject:

(i) Nokosa-naqsu-**Ø** [$_{\text{CJ}}$ <u>Norvin</u> kisi= li-ph-i-nomok malsanikuwam-ok].
quick-look$_{\text{AI}}$-**3** <u>Norvin</u> IC.PFV= there-take$_{\text{TA}}$-1OBJ-3:1PL.CJ store-LOC
'Norvin took a short time to get us to the store.' (EM 2023.03.14)

I will not discuss this particular construction here—I do not know if it's a genuine instance of long-distance subject agreement, or whether it involves a raising-to-subject deriviation or a subject control derivation.

c. Mali '-piluwitaham-**a-l** [$_{\text{IND}}$ Ø-nican-ol keq kisi= wapol-oluhke-Ø].
Mary 3-suspect$_{\text{TA}}$-**3OBJ-OBV.SG** 3-child-OBV.SG what PFV= wrong-do$_{\text{AI}}$-3
'Mary suspects her child of wrongdoing.'
https://pmportal.org/dictionary/piluwitahamal

(250) LDA into conjunct clauses

a. N-kocicihtu-n-**ol** [$_{\text{CJ}}$ eli nute-ssi-k mahsusi-yil].
1-know$_{\text{TI}}$-N-**IN.PL** IC.C out-move$_{\text{II}}$-CJ fiddlehead-IN.PL
'I know that the fiddleheads are out.' (RP 2023.01.21)

b. 'T-assokitaham-**a-l** Piyel [$_{\text{CJ}}$ eli kci= wewis-oski-li-t
3-be.surprised$_{\text{TA}}$-**3OBJ-OBV.SG** Peter IC.C big= nosy-behave$_{\text{AI}}$-OBV-3CJ
psuwis-ol].
cat-OBV.SG
'Peter is surprised that the cat is so nosy.' (GP 2023.01.24)

c. Ø-Nutom-on-**ol** [$_{\text{CJ}}$ ponapsku-l mete= poneqi-ye-k-il welaqik].
1-hear$_{\text{TI}}$-N-**IN.PL** rock-IN.PL IC.heard= down-go$_{\text{AI}}$-CJ-IN.PL last.night
'I heard stones falling down last night.' (GP 2023.01.30)

(251) LDA into subordinative clauses

a. Makolit '-pawatom-uw-**a**-n [$_{\text{SUB}}$ '-qasqi-li-n Piyel-ol sepawonu].
Margaret 3-want$_{\text{TI}}$-APPL-**3OBJ**-N 3-run$_{\text{AI}}$-OBV-N Peter-OBV.SG tomorrow
'Margaret wants Peter to run tomorrow.' (EM, RP 2022.03.28)

b. N-kiseht-uw-**a**-ne-n [$_{\text{SUB}}$ Can 't-oli-ntu-n].
1-make$_{\text{TI}}$-APPL-**3OBJ**-N-1PL John 3-thus-sing$_{\text{AI}}$-N
'We made John sing.' (GP, RP 2021.11.10)

c. N-kiseltom-uw-**a**-n [$_{\text{SUB}}$ Ø-mace-ptu-n wikhikon Lula].
1-let$_{\text{TI}}$-APPL-**3OBJ**-N 3-leave-take$_{\text{TI}}$-N letter Lawrence
'I let Lawrence take the letter away.' https://pmportal.org/dictionary/kiseltomuwan

In terms of morphology, we can note an immediate contrast between independent and conjunct LDA versus subordinative LDA. With independent and conjunct LDA, the attitude predicate is a plain monotransitive (TI or TA), agreeing with some argument inside its clausal complement as if it's the single object. In contrast, in subordinative LDA, the attitude predicate is ditransitive, with an applicative marker *-uw* 'APPL' on it, and it agrees with an embedded nominal as if it was the higher (indirect/applied) object.[12]

One basic fact worth noting at the outset is that the LDA target can either appear clearly in the embedded clause, or at the left edge of the embedded clause (impressionistically the most common option)—where it's unclear whether it's raised into the matrix clause or not—or sometimes even clearly in the matrix clause:

[12] There is at least one limited exception to this particular observation about subordinative LDA, which we can see in these following two examples:

(252) Multiple positions for conjunct LDA

a. N-piluwitaham-a eli Laca miyahsi= maca-ha-t.
   1-think.differently$_{TA}$-3OBJ IC.C Roger early= leave-go$_{AI}$-3CJ

b. N-piluwitaham-a Laca eli miyahsi= maca-ha-t.
   1-think.differently$_{TA}$-3OBJ Roger IC.C early= leave-go$_{AI}$-3CJ

   Both: 'I think differently of Roger for going home early.' (MA 2023.06.20)

(253) Multiple positions for subordinative LDA

a. Ma=te Sapet '-pawatom-uw-**a**-wi-n '-peciya-li-n weni-l
   NEG=EMPH Elizabeth 3-want$_{TI}$-APPL-**3OBJ**-NEG-N 3-come-OBV-N who-OBV.SG
   sepawonuk.
   tomorrow

b. Ma=te weni-l Sapet '-pawatom-uw-**a**-wi-n '-peciya-li-n
   NEG=EMPH who-OBV.SG Elizabeth 3-want$_{TI}$-APPL-**3OBJ**-NEG-N 3-come-OBV-N
   sepawonuk.
   tomorrow

   Both: 'Elizabeth doesn't want anyone to come tomorrow.' (EM 2022.08.15)

However, it seems like the syntactic properties of these two different options don't really differ, and they can be analyzed in a unified way (Bruening 2001b and LeSourd 2019a on independent/conjunct LDA, and Grishin 2023a on subordinative LDA). Bruening (2001b) and Grishin (2023a) propose that the variation in linear order simply boils down to variation in spellout of the relevant movement chain—spelling out the highest copy (overt movement) or a lower copy (covert movement). I'll follow these works in treating the varying surface syntax of apparently different LDA constructions as different surface realizations of the same underlying syntax.

We should also note that LDA in the general case is optional—non-agreement, if anything, is the more common option. There are a few exceptions to be discussed later, like certain interactions with long-distance *wh* movement, direct perception verbs, as well as some other exceptions I won't discuss, like *'kisehtuwan* 'make' which always participates in LDA. Below, we can see some sentences without LDA, with independent, conjunct, and subordinative complements:

(i) a. Ap-ankuwa-t Sapet, Ø-unitahasi-n-**ol** [$_{SUB}$ Ø-monuw-a-n molaqs-ol].
   IC.return-shop$_{AI}$-3CJ Elizabeth 3-forget$_{AI+O}$-N-**OBV.SG** 3-buy$_{TA}$-3OBJ-N milk-OBV.SG
   'When Elizabeth went to the store, she forgot to buy milk.' (CF 2023.01.29;FB)

b. Ø-Unitaham-**a-l** [$_{SUB}$ Maliw-ol '-tephom-uw-a-n eli= wolaqi-hpi-li-t].
   3-forget$_{TA}$-**3OBJ-OBV.SG** Mary-OBV.SG 3-serve$_{TI}$-APPL-3OBJ-N IC.thus= evening-eat$_{AI}$-OBV-3CJ
   'He forgot to give Mary her supper.' https://pmportal.org/dictionary/unitahamal

In these sentences, the matrix verb is a monotransitive (AI+O *unitahasin* 'forget' or TA *unitahamal* 'forget'), rather than a ditransitive. Interestingly, these are also subject control sentences, and the matrix verb is skipping over the embedded subject (PRO) to agree with an embedded object. As we'll soon see, this locality behavior also differs from more standard subordinative LDA, which is restricted to the highest argument in the embedded clause. I leave this particular kind of subordinative LDA aside for future work.

(254)

a.

Ma=te	n-kocicihtu-w-on	[$_{\text{IND}}$	nute-sson-Ø-ul	kosona	tan	].
NEG=EMPH	1-know$_{\text{TI}}$-NEG-N		out-move$_{\text{II}}$-3-IN.PL	or	WH	

'I don't know if they [the fiddleheads] are out or not.' (RP 2023.01.21)

b.

N-kisi=	wonitahasi-n	[$_{\text{CJ}}$	eli	n-qoss	cuwi=	sukolopanis-ke-t	].
1-PFV=	forget$_{\text{AI+O}}$-N		IC.C	1-son	must=	cookie-make$_{\text{AI}}$-3CJ	

'I forgot that my son had to make cookies.' (EM 2023.06.13)

c.

Piyel	'-pawatom-on	[$_{\text{SUB}}$	stahqon-ol	yut	mace-ki-li-n	].
Peter	1-want$_{\text{TI}}$-N		tree-OBV.SG	here	start-grow$_{\text{AI}}$-OBV-N	

'Peter wants a tree to grow here.' (GP, MA 2022.05.16)

In all these examples, the embedding verb is inflected for an inanimate singular object (either reflecting failed agreement or agreement with the embedded clause), even though there are no inanimate singular arguments inside the embedded clause that could be possible LDA targets.

In this section, I'm concerned with looking at the locality properties of LDA into these three different clause types, building on work by Bruening (2001b), LeSourd (2019a), and Grishin (2022). The core observation is that LDA into independent and conjunct clauses is *free* in Fry and Hamilton's (2016) typology of Algonquian LDA patterns (Bruening 2001b, LeSourd 2019a)—the matrix verb can agree with *any* argument in the embedded clause—wheres LDA into subordinative clauses is *restricted*, only occurring with the embedded argument in the highest A position (Grishin 2022). Following Bruening (2001b), Polinsky and Potsdam (2001), and Branigan and MacKenzie (2002), I claim that the freeness of independent and conjunct LDA is derived by the possibility of Ā movement to the left edge of the embedded clause feeding agreement (contra LeSourd 2010, 2019a). In contrast, I propose that the restrictedness of subordinative LDA derives from subordinative clauses lacking CP layers, and thus lacking a left-peripheral position for phrases to potentially move to to feed LDA.

5.2.1 LDA into independent and conjunct complements

Here I first show that independent and conjunct LDA is free, and then I summarize the arguments that this freeness is to be derived by Ā movement to the edge of the embedded clause. This kind of analysis is only possible if independent and conjunct clauses have a CP layer to Ā move to, and thus the freeness of independent and conjunct LDA serves as an argument for independent and conjunct clauses containing CPs.

First, let's look at the locality properties of LDA into independent clauses. Let's examine the following examples, where the independent complement contains a transitive verb, and thus there are two potential targets for LDA:

(255) LDA into independent clauses: free

a.

Ma=te	n-wewitaham-**a**-w	[$_{\text{IND}}$	<u>psi=te</u>	<u>wen</u>	tama	't-oli=
NEG=EMPH	1-remember$_{\text{TA}}$-**3OBJ**-NEG		<u>all=EMPH</u>	<u>who</u>	where	3-there=

kis-onuw-a-`	't-akom-`	].
PFV-buy$_{\text{TA}}$-3OBJ-OBV.PL	3-snowshoe-OBV.PL	

'I don't remember where <u>everyone</u> bought his snowshoes.' (Bruening 2001b: 272)

b. N-wewitaham-**a-k** [$_{IND}$ ma=te Ø-nomiy-a-wi-yik
1-remember$_{TA}$-**3obj-prox.pl** neg=emph 3-see$_{TA}$-3obj-neg-prox.pl
mawsuwinu-wok Kehlis-k].
person-prox.pl Calais-loc
'I remember that I didn't see people in Calais.' (Bruening 2001b: 259)

c. '-Sesomitaham-**a-`** Susehp [$_{IND}$ tama Tihtiyas '-toli= nomiy-a-`
3-wonder$_{TA}$-**3obj-obv.pl** Joseph where Tihtiyas 3-there= see$_{TA}$-3obj-obv.pl
psiw kiwhosu-`].
all muskrat-obv.pl
'Joseph can't imagine where Tihtiyas saw all the muskrats.' (Bruening 2001a: 44)

In (255a) we get agreement with the embedded agent *psi-te wen* 'everyone'. In (255b) we're getting agreement with the embedded object *mawsuwinuwok* 'people', though here the embedded agent 'I' is coreferential with the matrix attitude holder.[13] Finally, in (255c), we're skipping over the embedded agent (which is *not* coreferential with the attitude holder) in preference for LDA with the embedded object. Thus, LDA into independent clauses is free: we can agree with whichever argument we'd like.

Turning now to conjunct LDA, observe the following examples with embedded transitives:

---

[13]This is relevant because if we were to get LDA with the embedded agent, we'd expect a reflexive verb form. However, it seems that LDA (of any type) cannot feed reflexivization in Passamaquoddy:

(i) a. *Nil n-kosiciy-**us** [$_{CJ}$ eli koti= Susehp tqon-i-t].
1sg 1-know$_{TA}$-**refl** ic.C going.to= Joseph arrest$_{TA}$-1obj-3cj
Intended: 'I know (about myself) that Joseph will arrest me.' (Bruening 2001b: 273)

b. *Sapet '-pawatom-a-**si**-n [$_{SUB}$ '-tus-ol Ø-wicuhkem-ku-n].
Elizabeth 3-want$_{TI}$-appl-**refl**-n 3-daughter-obv.sg 3-help$_{TA}$-inv-n
Intended: 'Elizabeth wants herself to be helped by her daughter.' (EM 2022.08.15)

This seems to be true of every Algonquian language for which I am able to find the relevant data—for instance, it's also impossible for LDA to feed reflexivization in Ojibwe (Valentine 2001: 684) and Blackfoot (Frantz 1978: 94–95).

Interestingly, LDA *can* feed reciprocalization:

(ii) a. Susehp naka Piyel Ø-mili= kciciy-**utu**-Ø-wok [$_{CJ}$ eli Lehpit koti= tqon-a-t].
Joseph and Peter 3-varied= know$_{TA}$-**recip**-3-prox.pl ic.C Lehpit going.to= arrest$_{TA}$-3obj-3cj
'Joseph and Peter know (about each other) that Lehpit will arrest them.' (Bruening 2001b: 273)

b. Mali naka Sapet '-pawatom-aw-**oti**-ni-ya [$_{SUB}$ '-tomhuwa-ni-ya].
Mary and Elizabeth 3-want$_{TI}$-appl-**recip**-n-pl 3-win$_{AI}$-n-pl
'Mary and Elizabeth want each other to win.' (EM 2022.06.06)

This is also true of Blackfoot LDA (Frantz 1978: 99); I do not know about Ojibwe. I do not know what the difference is between reflexivization and reciprocalization that would explain this contrast.

(256) LDA into conjunct clauses: free

a. ‘-Kociciy-**a-l** Piyel [$_{CJ}$ eli k-posum psi=te
3-know$_{TA}$-**3obj-obv.sg** Peter ic.that 2-cat all=emph

noluwitaham-i-nokot].
feel.safe.with$_{TA}$-1obj-3:1pl.cj

‘Peter knows that your cat feels safe with all of us.’ (GP 2023.01.24)

b. Piyel Ø-nutuw-**a-l** [$_{CJ}$ Tigaw-ol etol-ahyem-a-t
Peter 3-hear$_{TA}$-**3obj-obv.sg** Tiger-obv.sg ic.prog-play.with$_{TA}$-3obj-3cj

wasis-`].
kid-obv.pl

‘Peter heard Tiger playing with the kids.’ (GP 2023.01.30)

c. **N**-kociciy-uku-**n** Piyel [$_{CJ}$ eli k-posum psi=te
1-know$_{TA}$-inv-**1pl** Peter ic.that 2-cat all=emph

noluwitaham-i-nokot].
feel.safe.with$_{TA}$-1obj-3:1pl.cj

‘Peter knows that your cat feels safe with all of us.’ (GP 2023.01.24)

d. Piyel Ø-nutuw-**a-`** [$_{CJ}$ Tigaw-ol etol-ahyem-a-t
Peter 3-hear$_{TA}$-**3obj-obv.sg** Tiger-obv.sg ic.prog-play.with$_{TA}$-3obj-3cj

wasis-`].
kid-obv.pl

‘Peter heard Tiger playing with the kids.’ (GP 2023.01.30)

In (256a–b), we’re getting LDA with the embedded external argument, and in (256c–d), we’re getting LDA with the embedded object. Just like with independent LDA, we’re free to choose which argument to agree with. A particularly striking example of this is the following:

(257) N-kosiciy-**a-k** [$_{CJ}$ eli Piyel litahasi-t [$_{CJ}$ eli kis-ankum-i-hti-t
1-know$_{TA}$-**3obj-prox.pl** ic.that Peter think$_{AI}$-3cj ic.that pfv-sell$_{TA}$-1obj-3pl-3cj

nikt ehpic-ik posonuti-yil]].
those.prox woman-prox.pl basket-in.pl

‘I know (of them) that Peter thinks those women sold me the baskets.’

(LeSourd 2019a: 360)

Here, the matrix verb *nkosiciyak* ‘I know (of them)’ is agreeing across two clause boundaries with the doubly-embedded *nikt ehpicik* ‘those women’.

Now that we’ve established that independent and conjunct LDA is free, we need to address the question of how to derive this state of affairs. I follow Bruening (2001b) (see also Polinsky and Potsdam 2001 on Tsez and Branigan and MacKenzie 2002 on Innu) in proposing that (potentially covert) Ā movement to the left periphery of the embedded clause can feed LDA (which is thus actually rather local), contra LeSourd (2010, 2019a), who argues for a prolepsis account. I summarize two of Bruening’s arguments for this conclusion and address LeSourd’s empirical objections to them (though see Bruening 2001b for more detailed discussion, as I am somewhat simplifying the state of affairs). The first argument is that (overtly) moved constituents can reconstruct for variable binding, and the second is that independent/conjunct LDA is sensitive to islands.

Let's first look at variable binding. The relevant observation is that we can overtly move an embedded object containing a bound variable to the left edge of the embedded clause, triggering LDA (in these examples, I will italicize the binder and I continue to underline the LDA target):

(258) a. N-kosiciy-**a** [$_{CJ}$ <u>nisuwihtic-il</u> eli *psi=te* *wen* kselom-a-t].
1-know$_{TA}$-**3OBJ** <u>his.spouse-OBV.SG</u> IC.C *all=EMPH* *who* love$_{TA}$-3OBJ-3CJ
'I know that *everyone$_i$* loves <u>his$_i$ spouse</u>.' (Bruening 2001b: 264)

b. N-kosiciy-**a** [$_{CJ}$ <u>w-ikuwoss-ol</u> eli *psi=te* *wen* kselom-iht].
1-know$_{TA}$-**3OBJ** <u>3-mother-OBV.SG</u> IC.C *all=EMPH* *who* love$_{TA}$-INV.3SG.CJ
'I know that *everyone$_i$* is loved by <u>his$_i$ mother</u>.' (Bruening 2001b: 264)

Here, *nisuwihticil* 'his spouse' and *wikuwossol* 'his mother' have overtly raised to Spec,CP (preceding the complementizer *eli*), and they can reconstruct to be bound by *psi-te wen* 'everyone'. This indicates that *nisuwihticil* 'his spouse' and *wikuwossol* 'his mother' can't have been born in the matrix clause (as they would have been under a prolepsis analysis), as, if so, the variables they contain wouldn't be able to be bound by *psi-te wen* 'everyone'.

LeSourd (2019a) argues against this by claiming that, for his consultants, variable binding doesn't seem to be sensitive to c-command, and thus Bruening's variable binding argument doesn't tell us anything. He provides examples like the following to illustrate this point, independent of LDA (here I bold the binder and underline the bindee):

(259) a. <u>W-ikuwoss-ol</u> itom-Ø [eli **psi=te** **wen** cuwi= 'sawato-k samaqan].
<u>3-mother-OBV.SG</u> say$_{AI}$-3 IC.C **all=EMPH** **who** should= beware$_{TI}$-3CJ water
'<u>His$_i$</u> mother says that **everyone$_i$** should be careful of the water.'
(LeSourd 2019a: 383)

b. <u>Nekom</u> nt-iy-oq [eli kisi= messunom-uw-ot **psi=te** **pilsqehsis**
<u>3SG</u> 1-tell$_{TA}$-INV IC.C PFV= show$_{TI}$-APPL-2SG:3CJ **all=EMPH** **girl**
pil-eya-hs-is-ol].
new-ADJZ-DIM-DIM-OBV.SG
'<u>She$_i$</u> told me that you showed **every girl$_i$** the new baby.' (LeSourd 2019a: 383)

In these examples, LeSourd claims that the embedded quantifiers *psi-te wen* 'everyone' and *psi-te pilsqehsis* 'every girl' can bind into the matrix subject, in a stark violation of typical c-command restrictions on variable binding. If so, in (258), it should be perfectly fine for *nisuwihticil* 'his spouse' and *wikuwossol* 'his mother' to be born in the matrix clause as matrix objects while still being bound by embedded quantifiers.

While this may be true for LeSourd's consultants (who I have not been able to work with), I don't think this is true for the speakers that I have worked with, for whom variable binding does seem to be sensitive to c-command, as illustrated by the following examples:

(260) a. *<u>Nekom</u>$_i$ Ø-mihtaqs-ol litahasu-Ø-wol [**psi=te** **wasis**$_i$ =oc tomhuwe-Ø].
<u>3sg</u> 3-father-obv.sg think$_{\text{AI}}$-3-obv.sg **all=emph** **kid** =fut win$_{\text{AI}}$-3
Intended: '<u>Their</u>$_i$ father thinks **every child**$_i$ will win.' (MA 2023.06.20)
MA: "All children will win? That doesn't make sense."

b. *Litahasu-Ø <u>*pro*</u>$_i$ [koti= tomhuwe-Ø **psi=te** **wen**$_i$ sepawonuk].
think$_{\text{AI}}$-3 going.to= win$_{\text{AI}}$-3 **all=emph** **who** tomorrow
Intended: '<u>They</u>$_i$ think **everyone**$_i$ is going to win tomorrow.' (EM 2023.06.13)
EM: "Then you have to take *litahasu* as just for one person."

c. *[Olomuss kesitaham-a-t <u>*pro*</u>$_i$] ma=te **weni-l**$_i$ '-kisi= pokehl-a-l.
dog ic.love$_{\text{TA}}$-3obj-3cj neg=emph **who-obv.sg** 3-pfv= bite$_{\text{TA}}$-3obj-obv.sg
Intended: '**No one**$_i$ was bitten by a dog that loves <u>them</u>$_i$.' (EM 2023.06.13)

d. *Ma=te **weni-l** '-kisi= pokehl-a-l [olomuss kesitaham-a-t <u>*pro*</u>$_i$].
neg=emph **who-obv.sg** 3-pfv= bite$_{\text{TA}}$-3obj-obv.sg dog ic.love$_{\text{TA}}$-3obj-3cj
Intended: '**No one**$_i$ was bitten by a dog that loves <u>them</u>$_i$.' (EM 2023.06.13)

In (260a-b), I've attempted to get a quantifier in the complement of *litahasu* 'think' to bind (into) the matrix subject, as in LeSourd's (259a-b)—that coindexation is impossible, as illustrated by the speaker comments. In (260c-d), I've attempted to get the internal argument of a direct verb to bind into a relative clause modifying the external argument (recall that in the direct, the external argument c-commands the internal argument)—the result is ungrammatical (at least under the bound interpretation), no matter the word order.

In order to express these bound readings, we have to ensure that the quantifier c-commands the variable, as in the following sentences:

(261) a. **Psi=te** **wasis**$_i$ Ø-mihtaqs-ol litahasu-Ø-wol [<u>nekom</u>$_i$ =oc tomhuwe-Ø].
all=emph **kid** 3-father-obv.sg think$_{\text{AI}}$-3-obv.sg <u>3sg</u> =fut win$_{\text{AI}}$-3
'**Every child's**$_i$ father thinks <u>they</u>$_i$ will win.' (MA 2023.06.20)

b. **Psi-te** **wen**$_i$ litahasu-Ø [koti= tomhuwe-Ø <u>*pro*</u>$_i$ sepawonuk].
all=emph **who** think$_{\text{AI}}$-3 going.to= win$_{\text{AI}}$-3 tomorrow
'**Everyone**$_i$ thinks <u>they</u>$_i$ are going to win tomorrow.' (EM 2023.06.13)

c. Ma=te **wen**$_i$ '-kisi= pokehl-oku-wi-yil [olomuss-ol kesitaham-iht <u>*pro*</u>$_i$].
neg=emph **who** 3-pfv= bite$_{\text{TA}}$-inv-neg-obv.sg dog-obv.sg ic.love$_{\text{TA}}$-inv.3sg.cj
'**No one**$_i$ was bitten by a dog that loves <u>them</u>$_i$.' (EM 2023.06.13)

In (261a), the quantifier *psi-te wasis* 'every child' is the possessor of the matrix subject, and is able to bind the embedded subject *nekom* 'he, she', resulting in a covarying interpretation. In

(261b), the quantifier *psi-te wen* ‘everyone’ now the matrix subject, and it is handily able to bind the null embedded subject to result in a covarying reading. Lastly, in (261c), we’ve changed the verb from direct to third person inverse, where the internal argument A-moves over the external argument—and once we do that, it’s possible for the internal argument *wen* ‘who, anyone’ to bind into the external argument *olomussol kesitahamiht* ‘a dog that loves them’. LeSourd’s objection to Bruening’s reconstruction argument thus cannot hold for these particular speakers.

The second argument Bruening provides in favor of the Ā movement analysis of independent and conjunct LDA is that it’s sensitive to islands—both overt and covert Ā movement:

(262) a. ??N-kosiciy-**a-k** [$_{CJ}$ ’Tolitoli naka w-itapi-hil$_i$ eli Mihku koti=
1-know$_{TA}$-**3OBJ-PROX.PL** Tolitoli and 3-friend-OBV.SG IC.C Mihku going.to=
maca-ha-t [$_{island}$ mesq t_i peci-ya-hti-h-q]].
leave-go$_{AI}$-3CJ not.yet IC.come-go$_{AI}$-3PL-NEG-3CJ
Intended: ‘I know about Tolitoli and her friend that Mihku is going to leave [before they arrive].’ (Bruening 2001b: 266)

b. *N-kosiciy-**a-k** [$_{CJ}$ kis-ankuwehtu-won [$_{island}$ atomupil-ol Piyel naka
1-know$_{TA}$-**3OBJ-PROX.PL** IC.PFV-sell$_{TI}$-2SG.CJ car-IN.PL Peter and
Susehp mil-os-k-oponi-l]].
Joseph IC.give$_{TA+O}$-2OBJ-3CJ-PRET-IN.PL
‘Intended: I know (about them) that you sold [the cars Peter and Joseph gave you].’ (Bruening 2001b: 266)

c. *Ma=te n-wewitaham-**a**-wi-**yik** [$_{CJ}$ Susehp kisi= qecimul-os-k
NEG=EMPH 1-remember$_{TA}$-**3OBJ**-NEG-**PROX.PL** Joseph IC.PFV= ask$_{TA}$-2OBJ-3CJ
[$_{island}$ keq kisihtu-hti-t skitapi-yik]].
what IC.make$_{TI}$-3PL-3CJ man-PROX.PL
Intended: ‘I don’t remember (about them) if Susehp asked you [what the men made].’ (Bruening 2001b: 266)

In (262a) we have an adjunct island violation, moving *’Tolitoli naka witapihil* ‘Tolitoli and her friend’ out of the adjunct *mesq peciyahtihq* ‘before they arrive’ to the edge of the embedded clause in order to get LDA with it—the result is not grammatical. In (262b) we have a Complex NP Constraint violation with *in situ* LDA (derived by covert Ā movement): here, the LDA target *Piyel naka Suseph* ‘Peter and Joseph’ is inside a relative clause, thus rendering it inaccessible to LDA. Finally, in (262c), we have a *wh* island violation, again with *in situ* LDA, where the LDA target *skitapiyik* ‘the men’ is inside am embedded *wh* question. Since LDA is sensitive to islands, it *must* be derived by movement, and there cannot be a prolepsis parse. It’s worth comparing this data to (257), where we saw that LDA *is* indeed possible across two clause boundaries, as long as there aren’t any islands along the way.

LeSourd (2010, 2019a) disputes this data, and claims that, though plain *wh* movement shows island effects, LDA doesn’t (in these examples I bracket the LDA target as part of the matrix clause, as that is the structure LeSourd argues for):

(263) a. N-ikuwoss '-kosiciy-**a-l** n-itapi-yil$_i$ [$_{\text{CJ}}$ eli psi=te wen kisi=
1-mother 3-know$_{\text{TA}}$-**3OBJ-OBV.SG** 1-friend-OBV.SG IC.C all=EMPH who PFV=
maca-ha-t [$_{island}$ mesq t_i mace-ntu-h-k]].
leave-go$_{\text{AI}}$-3CJ not.yet start-sing$_{\text{AI}}$-NEG-3CJ
'My mother knows about my friend that everyone left [before he started singing].'
(LeSourd 2010: 178)

b. N-kosiciy-**a-k** Ø-nikihku-nnu-k$_i$ [$_{\text{CJ}}$ eli Piyel mec
1-know$_{\text{TA}}$-**3OBJ-PROX.PL** 1-parent-1PL-PROX.PL IC.C Peter still
al-ko-k [$_{island}$ utapakon t_i kis-onuhm-uw-ew-a-hti-t-pon]].
around-drive$_{\text{TI}}$-3CJ car IC.PFV-buy$_{\text{TI}}$-APPL-APPL-3OBJ-3PL-3CJ-PRET
'I know about our parents that Peter is still driving [the car they bought for him].'
(LeSourd 2019a: 376)

c. N-kosiciy-**a-k** pilsqehsis-ok$_i$ [$_{\text{CJ}}$ eli Piyel kisi= yuh-us-k
1-know$_{\text{TA}}$-**3OBJ-PROX.PL** girl-PROX.PL IC.C Peter PFV= tell$_{\text{TA}}$-2OBJ-3CJ
[$_{island}$ keq Mali keti= peci-ptu-w-a-t t_i]].
what Mary IC.going.to= come-take$_{\text{TI}}$-APPL-3OBJ-3CJ
'I know about the girls that Peter told you [what Mary was going to bring for them].'
(LeSourd 2010: 178)

For LeSourd's consultants, LDA (with overt movement, at least) is not sensitive to adjunct islands (263a), the Complex NP Constraint (263b), or *wh* islands (263c). Unfortunately he only provides examples with overt movement to exemplify this point.

I doubt that this is true for the speakers that I've worked with. One striking reason to believe this is that, for these speakers, LDA is also sensitive to the Left Branch Condition, a novel observation that has not been reported before in the literature. Put differently, you cannot get LDA with a possessor:[14]

[14]Expectedly, given LeSourd's analysis, he reports the opposite conclusion (unfortunately he only provides examples with overt raising):

(i) a. Asseloma '-kociciy-**a-l** Piyel-ol$_i$ toke [$_{\text{CJ}}$ eli ksinuhka-li-t
Samuel 3-know$_{\text{TA}}$-**3OBJ-OBV.SG** Peter-OBV.SG now IC.C be.sick$_{\text{AI}}$-OBV-3CJ
[t_i Ø-hesis-ol] wolaku].
3-older.brother-OBV.SG yesterday
'Samuel knows now that Peter's older brother was sick yesterday.' (LeSourd 2019a: 360)

b. N-kosiciy-**a** psi=te wen$_i$ [$_{\text{IND}}$ tama [t_i w-ikuwoss-ol] n-kisi= kat-a-ku-n-ol
1-know$_{\text{TA}}$-**3OBJ** all=EMPH who where 3-mother-OBV.SG 1-PFV= hide$_{\text{TI}}$-APPL-INV-N-OBV.SG
't-amsqocehkan-ol].
3-doll-OBV.SG
'I know where everyone's mother hid her doll from me.' (LeSourd 2019a: 386)

c. Wen$_i$ kil piluwitaham-**ot** [$_{\text{CJ}}$ eli kisi= miluwi-Ø [t_i 't-olayyektakon-ol]]?
who 2SG suspect$_{\text{TA}}$-**2SG:3CJ** IC.C PFV= give.away$_{\text{AI+O}}$-1SG.CJ 3-toy-IN.PL
'Whose toys did you suspect (about him) that I gave away?' (LeSourd 2019a: 393)

(264) a. *'-Kociciy-**oq** Piyel [$_{\text{CJ}}$ eli k-posu-m psi=te noluwitaham-i-nokot].
2-know$_{\text{TA}}$-**INV** Peter IC.C 2-cat-POSS all=EMPH feel.safe.with$_{\text{TA}}$-1OBJ-3:1PL.CJ
Intended: 'Peter knows (about you) that your cat feels safe with all of us.' (GP 2023.01.24)

b. ***K**-nomiy-**ul** [$_{\text{CJ}}$ k-posu-m etoli= nutiy-api-t khakon-ok].
2-see$_{\text{TA}}$-**2OBJ** 2-cat-POSS IC.PROG= out-look$_{\text{AI}}$-3CJ door-LOC
Intended: 'I see your cat looking out the door.' (GP 2023.01.30)

For other reasons to believe true possessor extraction is not actually possible in Passamaquoddy see Sections 2.3.2 and 10.3.2. I conclude that LDA *is* sensitive to islands, and thus must be derived by movement—Bruening is right.

To summarize the discussion so far, I've provided two of Bruening's arguments that LDA is fed by (potentially covert) Ā movement: reconstruction for variable binding and sensitivity to islands. I then showed that the consultants I worked with seem to pattern with Bruening's judgments, rather than those reported by LeSourd. Thus, for these speakers, we should conclude that LDA is indeed derived by Ā movement to the embedded left periphery, following Bruening (2001b), Polinsky and Potsdam (2001), and Branigan and MacKenzie (2002).

There are two important consequences to point out here. The first is that, given that independent and conjunct LDA is free, there must be a left-peripheral position for phrases to Ā move to in independent and conjunct clauses—in other words, we again see that independent and conjunct clauses host CP layers. The second is the useful observation that LDA allows us to diagnose different kinds of Ā movement that are not as obvious as *wh* movement or relativization (for instance, topicalization and focus movement), and in particular *covert* Ā movement. This second observation will prove very useful in the sections to come.

5.2.2 LDA into subordinative complements

In contrast to independent and conjunct LDA, which has an Ā locality profile, subordinative LDA is very restricted, displaying an A locality profile. To see this, we first need to recall the discussion from Section 2.4.3 where we saw that the third person inverse, but not the SAP inverse, involves syntactic inversion (see also Grishin 2022, Oxford 2023d)—thus, in all transitive scenarios the agent c-commands the object, except in the 3⟶3 inverse where the internal argument A-moves over the external argument.

Recall that in subordinative LDA, the matrix verb shows *indirect object* agreement with an embedded argument (see also Dahlstrom 2023 for another kind of ditransitive LDA in Meskwaki). Agreement with indirect objects is generally only for person (and not number), and indirect objects can only be animate, so therefore we will be able to see the basic pattern most clearly in SAP⟶SAP, SAP⟶3, and 3⟶SAP scenarios. Below I exemplify with the verb *'pawatomon* 'want'—see Section 2.4.3 and Grishin (2022) for more details:

(265) $\boxed{1}$⟶2: agreement with 1 only

a. Sapet **n**-pawatom-a-**ku**-n [$_{\text{SUB}}$ '-kinolu-l-on].
Elizabeth **1**-want$_{\text{TI}}$-APPL-**INV**-N 2-praise$_{\text{TA}}$-2OBJ-N
'Elizabeth wants me to praise you.' (RP 2022.05.02)

b. *Sapet **k**-pawatom-a-**ku**-n [$_{SUB}$ '-kinolu-l-on].
Elizabeth **k**-want$_{TI}$-APPL-**INV**-N 2-praise$_{TA}$-2OBJ-N
Intended: 'Elizabeth **wants** me to praise you.' (RP 2022.05.02)

(266) $\boxed{1}$→3: agreement with 1 only

a. Roger **n**-puwatom-a-**ku**-n [$_{SUB}$ nt-oli-ntu-wew-a-n Asawis].
Roger **1**-want$_{TI}$-APPL-**INV**-N 1-thus-sing$_{AI}$-APPL-3OBJ-N John
'Roger wants me to sing to John.' (EM, RP 2021.11.17)

b. *Roger '-pawatom-uw-**a**-n [$_{SUB}$ Husaw-ol nt-oli-ntu-wew-a-n].
Roger 3-want$_{TI}$-APPL-**3OBJ**-N John-OBV.SG 1-thus-sing$_{AI}$-APPL-3OBJ-N
Intended: 'Roger wants me to sing to John.' (GP, MA 2022.05.16)

(267) $\boxed{3}$→1: agreement with 3 only

a. Roger '-pawatom-uw-**a**-n [$_{SUB}$ Winiw-ol nt-ol-ahyem-ku-ne-n].
Roger 3-want$_{TI}$-APPL-**3OBJ**-N Winnie-OBV.SG 1-thus-play.with$_{TA}$-INV-N-1PL
'Roger wants Winnie to play with us.' (MA 2023.02.21)

b. *Roger **n**-pawatom-a-**ku**-ne-**n** [$_{SUB}$ nt-ol-ahyem-ku-ne-n Wini(w-ol)].
Roger **1**-want$_{TI}$-APPL-**INV**-N-**1PL** 1-thus-play.with$_{TA}$-INV-N-1PL W.(-OBV.SG)
Intended: 'Roger wants Winnie to play with us.' (MA 2023.02.21)

In all these cases, we can only get agreement with the embedded external argument, as demonstrated by the (a) examples. Trying to agree with the internal argument, like in the (b) examples, is impossible, in striking contrast to independent and conjunct LDA.

The crucial data point that tells us that this is about A locality and is not just agreement with external arguments is the third person inverse: it's possible to agree with the internal argument as long as you have a third person inverse in the subordinative complement. We can see this most clearly in IN→3AN scenarios:

(268) IN→$\boxed{\text{3AN}}$: agreement with 3AN (only)

a. Sapet '-pawatom-uw-**a**-n [Piyel-ol '-teksqi-hka-ku-n
Elizabeth 3-want$_{TI}$-APPL-**3OBJ**-N Peter-OBV.SG 3-sneeze$_{AI}$-CAUS-INV-N
tehpiseweya-l].
pepper-IN.PL
'Elizabeth wants pepper to make Peter sneeze.' (GP, MA, RP 2022.04.04)

b. Sapet '-pawatom-uw-**a**-n [kiwhosuwasq '-kikuh-uku-n Lacaw-ol].
Elizabeth 3-want$_{TI}$-APPL-**3OBJ**-N flagroot 3-heal$_{TA}$-INV-N Roger-OBV.SG
'Elizabeth wants flagroot to heal Roger.' (EM, RP 2022.05.09)

c. N-kiseht-uw-**a**-n [wasis '-kiptehka-ku-n n-utapakon].
1-make$_{TI}$-APPL-**3OBJ**-N kid 3-knock.over$_{TA}$-INV-N 1-sled
'I made my sled knock over the child.' (EM 2022.10.12)

As the external argument in these examples is inanimate, we must be getting subordinative LDA with the internal argument here. This data is most relevant for those speakers (EM and RP) who cannot get subordinative LDA with the internal argument in IN→SAP scenarios—see discussion in Section 2.4.3. The contrast between IN→SAP and IN→3 tells us that, at least for these speakers, subordinative LDA doesn't just look for the highest animate argument—instead, it looks for the highest argument, and then is only able to agree if it's animate. Generally, the external argument is the highest argument—the only exception is in the third person inverse, where the internal argument A moves above it.

So subordinative LDA shows A locality behavior: you can only get subordinative LDA with the embedded argument in the highest A position. The question is why—why should subordinative LDA differ in its locality properties from independent and conjunct LDA? The idea that subordinative clauses lack a CP layer allows us to explain this contrast. Under the assumption that only CP is able to host Ā probes and be a landing site for Ā movement in Passamaquoddy (and maybe also VoiceP, being a phase edge—crucially not any projections in the TP domain), then the reason subordinative LDA is restricted is because there is nowhere for phrases to Ā move to at the clause edge in order to feed LDA. Again we see that subordinative clauses are not able to participate in the same kinds of Ā processes as independent and conjunct clauses, a fact that boils down, I argue, to their structurally reduced nature.

5.3 Interactions between Ā extraction and long-distance agreement

Now that I've introduced a number of Ā constructions (primarily *wh* movement and relativization), as well as the idea that LDA can be used as a probe for what has moved to the left edge of a clause, let's examine the two phenomena in conjunction: what can LDA tell us about other kinds of Ā constructions, and what light does this shed on clause size? In this section I explore how LDA interacts with embedded *wh* questions, as well as how it interacts with long-distance *wh* movement. While the existing literature (Bruening 2001b, LeSourd 2019a) has looked at this interaction with the epistemic LDA predicates (e.g. *'kocicihtun* 'know', *wewitahatomon* 'remember', *'piluwitahatomon* 'suspect, think differently', etc.), I provide novel data on the interaction of Ā extraction and LDA with perception verbs (*nomihtun* 'see', *nutomon* 'hear', etc.) and subordinative LDA predicates (*'pawatomon* 'want', *'kisehtun* 'make', etc.). The resulting picture is one where we have three classes of complements: complements of epistemic LDA predicates, complements of (direct) perception verb LDA predicates, and complements of subordinative LDA predicates.[15] I suggest that we can understand this pattern as stemming from three different sizes of complements in a model with a split CP (Rizzi 1997 a.m.o.): the epistemic predicates embed a larger phasal CP, direct perception verbs embed a smaller non-phasal CP, and subordinative-selectors embed a (non-phasal) TP.

[15]There are also emotive LDA predicates like *'tassokitahatomon* 'be surprised', but I haven't examined their LDA behavior in any detail. I leave these aside for future work.

5.3.1 Independent and conjunct complements of epistemic attitudes

Here we'll examine Ā extraction and LDA in and out of the complements of predicates like *'kocicihtun* 'know', *wewitahatomon* 'remember', *unitahasin* 'forget', *'piluwitahatomon* 'suspect, think differently', etc., which I'll call EPISTEMIC ATTITUDES, as they describe an agent's epistemic state. These predicates typically embed conjunct, but they can also embed independent as a secondary option. We'll see that generally LDA is always free, except when long-distance *wh* moving *wen* 'who' and *keq* 'what', when we *must* get LDA with the *wh* phrase.

Looking first at embedded *wh* questions, we can observe that two things: *(i)* it's possible to agree with the embedded *wh* phrase; and *(ii)* you can also agree with something else. Below, we can see a few examples of LDA with an embedded *wh* item:[16]

(269) LDA with *wh* phrases

a.

'-Kociciy-**a-l**	Piyel	[$_{\text{CJ}}$	<u>weni-l</u>	kehci=	wewis-oski-li-t	].
3-know$_{\text{TA}}$-**3OBJ-OBV.SG**	Peter		<u>who-OBV.SG</u>	IC.big=	nosy-behave$_{\text{AI}}$-OBV-3CJ	

'Peter knows <u>who</u> is very nosy.' (GP 2023.01.24)

b.

Piyel	ma=te	Ø-wewitaham-**a**-wi-**yil**	[$_{\text{CJ}}$	<u>weni-l</u>	kisi=
Peter	NEG=EMPH	3-remember$_{\text{TA}}$-**3OBJ**-NEG-**OBV.SG**		<u>who-OBV.SG</u>	IC.PFV=

mil-uk	atomupil	].
give$_{\text{TA+O}}$-1SG:3CJ	car	

'Peter doesn't remember <u>who</u> I gave a car to.' (Bruening 2001b: 270)

c.

Ma=te	n-kocicy-**a**-w	[$_{\text{CJ}}$	<u>wen</u>	nit	el-tah-a-t].
NEG=EMPH	1-know$_{\text{TA}}$-**3OBJ**-NEG		<u>who</u>	that.IN.SG	IC.thus-hit$_{\text{TA}}$-3OBJ-3CJ

'I don't know who hit him that way.' https://pmportal.org/dictionary/oltahal

[16] Bruening (2001b) and Branigan and MacKenzie (2002) argue from this kind of data against a prolepsis account of Algonquian LDA, suggesting that there can be no coherent semantic interpretation for a structure where an embedded *wh* item is coindexed with a matrix object pronoun—the putative proleptic object that would be the true target of LDA. Nor could there be an interpretation where the *wh* item is born in the matrix clause as a proleptic object, coindexed with an embedded pronoun—how could it then scope into the embedded clause to result in a question denotation for the clausal complement?

(i) Two uninterpretable (?) configurations

a. *...V.AGR ... *pro*$_i$ ... [*wh*$_i$ ...

b. *...V.AGR ... *wh*$_i$ ... [... *pro*$_i$ ...

However, LeSourd (2019a) proposes that (i.a) is actually the right structure for LDA with *wh* items in Passamaquoddy (he argues that (i.b) is unavailable, at least as a genuine embedded *wh* question). Given his claim that Passamaquoddy (at least the language spoken by his consultants) doesn't require c-command for binding, it's not inconceivable how one might get a correct bound reading for (i.a). Additionally, as pointed out to me by Amy Rose Deal (p.c.), it might be a bit premature to completely rule out a configuration like (i.b), especially given proposals that proleptic constructions can result in readings with embedded scope via scope lowering mechanisms (e.g. *de dicto* or third readings; Dawson and Deal 2019, Tsilia 2023). In any event, given the arguments from reconstruction for variable binding and island effects given above, I will follow Bruening (2001b) and Branigan and MacKenzie (2002) in claiming that these agreeing *wh* phrases are located in Spec,CP of the embedded clause.

It's also possible to agree with another DP that's not the *wh* phrase in these kinds of constructions (though, impressionistically, this option seems less common than agreement with the *wh* phrase):

(270) LDA with another DP

a. Ma=te n-wewitaham-**a**-wi-**yik** [$_{\text{IND}}$ mahtoqehsu-wok tama =al
NEG=EMPH 1-remember$_{\text{TA}}$-**3OBJ**-NEG-**PROX.PL** rabbit-PROX.PL where =NDIR
n-toli= putoma-n-ok kcihku-k].
1-there= lose$_{\text{AI+O}}$-N-PROX.PL forest-LOC
'I don't remember where in the forest I lost the rabbits.' (Bruening 2001b: 262)

b. N-kosiciy-**a**-**k** [$_{\text{CJ}}$ nuhu-wok muwinu-wok keq kis-otomu-hti-t].
1-know$_{\text{TA}}$-**3OBJ**-**PROX.PL** three-PROX.PL bear-PROX.PL what IC.PFV-eat$_{\text{TI}}$-3PL-3CJ
'I know what the three bears ate.' (Bruening 2001b: 177)

c. N-kosiciy-**a**-**k** [$_{\text{CJ}}$ keq nuhu-wok muwinu-wok kis-otomu-hti-t].
1-know$_{\text{TA}}$-**3OBJ**-**PROX.PL** what three-PROX.PL bear-PROX.PL IC.PFV-eat$_{\text{TI}}$-3PL-3CJ
'I know what the three bears ate.' (Bruening 2001b: 177)

d. Ma=te n-kociciy-**a**-w [$_{\text{IND}}$ keq kisi= ol-luhke-Ø Tihtiyas wolaku].
NEG=EMPH 1-know$_{\text{TA}}$-**3OBJ**-NEG what PFV= thus-do$_{\text{AI}}$-3 Tihtiyas yesterday
'I don't know what Tihtiyas did yesterday.' (EM 2021.10.06)

In most of these kinds of examples, the LDA target will appear to the left of the *wh* phrase, as in (270a–b). However, it's also possible for the agreeing DP to appear after the *wh* phrase, as in (270c–d). Given that covert Ā movement seems to exist in Passamaquoddy and can feed LDA, this is perhaps not unsurprising—these seemingly low agreeing DPs have probably covertly moved to a high position above the *wh* phrase to become the most local LDA target for the matrix verb.

Finally, it's worth noting that with an embedded *wh* question, LDA is optional, just like in all the other basic cases we've seen so far:

(271) a. '-Kocicihtu-n Piyel [$_{\text{CJ}}$ weni-l kehci= wewis-oski-li-t].
3-know$_{\text{TI}}$-N Peter who-OBV.SG IC.big= nosy-behave$_{\text{AI}}$-OBV-3CJ
'Peter knows who is very nosy.' (GP 2023.01.24)

b. Ma=te k-wewitahatomu-w-on [$_{\text{CJ}}$ wen yali= cuspes-ke-t]?
NEG=EMPH 2-remember$_{\text{TI}}$-NEG-N who IC.around= porpoise-hunt$_{\text{AI}}$-3CJ
'Don't you remember who used to go porpoise-hunting?'
(https://pmportal.org/dictionary/cuspeske)

In these sentences, the matrix verb is inflected for an inanimate singular object (potentially agreement with the embedded clause), and does not agree with the embedded *wh* item (which is animate). To sum up: embedded *wh* questions don't change the behavior of LDA. LDA is still free and optional.

Turning to long-distance *wh* movement out of LDA complements of epistemic attitudes, we find a different pattern. First, we can note the striking fact that long-distance *wh* movement of DPs (*wen* 'who' and *keq* 'what') *forces* LDA with the *wh* item (an observation also reported by

Bruening 2001b and LeSourd 2019a). Thus, for instance, we can't use a non-agreeing TI form in a long-distance *wen* 'who' question:

(272) a. Weni-l Cora wewitaham-**a**-t [eli nomiy-a-t lamiw kcihku-k]?
who-OBV.SG Cora IC.remember$_{TA}$-**3OBJ**-3CJ IC.that see$_{TA}$-3OBJ-3CJ inside forest-LOC
'Who did Cora remember that she saw in the woods?' (GP 2023.01.24;NR)

b. *Weni-l wewitahato-k Cora [eli nomiy-a-t lamiw kcihku-k]?
who-OBV.SG IC.remember$_{TI}$-3CJ Cora IC.that see$_{TA}$-3OBJ-3CJ inside forest-LOC
Intended: 'Who did Cora remember that she saw in the woods?' (GP 2023.01.24)

(273) a. Wen wewitaham-**Ø**-eq [$_{CJ}$ eli olomi-ya-t Neqotku-k]?
who IC.remember$_{TA}$-**3OBJ**-2PL.CJ IC.C away-go$_{AI}$-3CJ Neqotkuk-LOC
'Who do y'all remember went to Neqotkuk?' (EM 2023.04.11;NR)

b. *Wen wewitahatom-eq [$_{CJ}$ eli olomi-ya-t Neqotku-k]?
who IC.remember$_{TI}$-2PL.CJ IC.C away-go$_{AI}$-3CJ Neqotkuk-LOC
Intended: 'Who do y'all remember went to Neqotkuk?' (EM 2023.04.11;NR)

Here, the (a) examples involve TA verbs agreeing with the *wh* item *wen* 'who'. If we try to use a non-agreeing TI form, as in the (b) examples, the result in ungrammatical.

Furthermore, we need to be agreeing with the *wh* phrase—we can't get LDA with another goal, despite the typical freeness of LDA into conjunct complements:

(274) a. Wen kil piluwitaham-**ot** [$_{CJ}$ kisi= komutonom-uk]?
who 2SG IC.suspect$_{TA}$-**2SG:3CJ** IC.PFV= rob$_{TA}$-1SG:3CJ
'Who do you suspect that I robbed?' (Bruening 2001b: 177)

b. *Wen kil piluwitaham-**i**-yin [$_{CJ}$ kisi= komutonom-uk]?
who 2SG IC.suspect$_{TA}$-**1OBJ**-2SG.CJ IC.PFV= rob$_{TA}$-1SG:3CJ
Intended: 'Who do you suspect (of me) that I robbed?' (Bruening 2001b: 177)

(275) a. Wen wewitaham-**ot** [$_{CJ}$ eli ap-sakiy-uk]?
who IC.remember$_{TA}$-**2SG:3CJ** IC.C return-see$_{TA}$-1SG:3CJ
'Who do you remember that I went to see?' (LeSourd 2019a: 389)

b. *Wen wewitaham-**i**-hin [$_{CJ}$ eli ap-sakiy-uk]?
who IC.remember$_{TA}$-**1OBJ**-2SG.CJ IC.C return-see$_{TA}$-1SG:3CJ
Intended: 'Who do you remember (about me) that I went to see?'
(LeSourd 2019a: 389)

In these sentences, we're long-distance *wh* moving the embedded object *wen* 'who'. The (a) examples demonstrate that we can have LDA with that object. In contrast, if we try to agree with the embedded external argument as in the (b) examples, the result is ungrammatical.

Note that this is also true if the *wh* item is *keq* 'what'—in this case, the verb must show inanimate object agreement, and cannot agree with another embedded argument:

(276) a. Keq kecicihtu-won [$_{\text{CJ}}$ '-qoss ehcuwi= lihta-q]?
what IC.know$_{\text{TI}}$-2SG.CJ 2-son IC.must= make$_{\text{TI}}$-3CJ
'What do you know your son has to make?' (EM 2023.06.13)

b. *Keq keciciy-**ot** [$_{\text{CJ}}$ '-qoss ehcuwi= lihta-q]?
what IC.know$_{\text{TA}}$-**2SG:3CJ** 2-son IC.must= make$_{\text{TI}}$-3CJ
Intended: 'What do you know (about your son) that he has to make?' (EM 2023.06.13)

In (276a), *kecicihtuwon* 'you know.CJ it' is inflected for an inanimate singular object (which we can see from the TI final *-htu*)—and given that long-distance *wh* movement forces LDA (at least if the attitude predicate is an epistemic LDA predicate), *kecicihtuwon* 'you know.CJ it' must then be agreeing with *keq* 'what'. If we try to agree instead with the embedded subject *'qoss* 'your son', as in (276b), the result is ungrammatical.

That was the behavior of long-distance extraction of *wen* 'who' and *keq* 'what', which are both DPs (and in all these examples, in argument position)—agreement targets *par excellence*. What about long distance movement of adjuncts like *tama* 'where', *tayuwek* 'when', or *tan* 'how'?

(277) a. Tama Cora 't-otoli= mihqitahasi-n-**ol** [$_{\text{CJ}}$ kisi= puno-k sisqeya-l]?
where Cora 3-PROG= recall$_{\text{AI+O}}$-N-**IN.PL** IC.PFV= put$_{\text{TI}}$-3CJ glasses-IN.PL
'Where did Cora remember she put her glasses?' (GP, MA 2023.04.25;NR)

b. Tama apc n-kociciy-**a**-n [$_{\text{CJ}}$ kisi= puno-k wikhikon-ol]?
where again 1-know$_{\text{TA}}$-**3OBJ**-1PL IC.PFV= put$_{\text{TI}}$-3CJ book-IN.PL
'Where else do we know she put the books?' (EM, 2023.06.13;NR)

c. Tan kt-oli= wewitaham-**a**-n [$_{\text{IND}}$ tan tuci= molikikona-ne-ss]?[18]
WH 2-thus= remember$_{\text{TA}}$-**3OBJ**-N WH much= be.strong$_{\text{AI}}$-N-DUB
'How strong do you remember he was?' (Bruening 2001b: 183)

As we can see, long-distance extraction of these adjuncts that lack φ features doesn't affect how LDA behaves—we still get free LDA, and we can agree with something other than the *wh* phrase.

We can summarize the interactions between epistemic LDA and Ā extraction as follows:

(278) Summary of interactions between LDA into an epistemic complement and *wh* movement

a. embedded *wh* question (any kind): **free LDA**

b. long-distance *wen* 'who' or *keq* 'what' question: **must get LDA with *wh* item**

c. long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: **free LDA**

[18] This particular example is a *wh*-copy construction, where *tan* 'how' appears both at the left edge of the embedded clause as well as the matrix clause. Bruening (2006) argues that these constructions involve spelling out two copies of the same movement chain—thus, the second *tan* 'how' would be the intermediate copy in embedded Spec,CP.

Put differently, we could say that long-distance questions divide into two classes depending on whether you're moving a *wh* item with φ features (a DP), like *wen* 'who' or *keq* 'what', or a *wh* item without φ features (not a DP), like *tama* 'where', *tayuwek* 'when', or *tan* 'how'.

Existing accounts of this behavior

There are two existing accounts of oligatory LDA with *wh* items in long-distance *wh* questions: an economy-based account by Bruening (2001b), and an island-based account by LeSourd (2019a) (see also discussion of similar data in Innu in Branigan and MacKenzie 2002). Here, I present both accounts and argue against both of them (though we'll have to wait until the next section to see the full argument against Bruening's proposal).

LeSourd (2019a) has an interesting and rather elegant proposal built on his idea that LDA is actually prolepsis. He suggests that complements of epistemic LDA predicates are actually all islands, and thus impossible to move out of. Thus, the only way to get the surface appearance of long-distance *wh* movement out of one of these complements is to actually move out of the matrix proleptic object position, thus deriving the obligatoriness of LDA with the *wh* phrase in long-distance *wh* questions.

There are two major problems with this simple account, though. The first is that for many (if not most or even all) Passamaquoddy speakers, LDA does indeed seem to involve a non-proleptic derivation (as discussed above). But, even granting that LeSourd's prolepsis account of LDA is correct, his proposal for accounting for obligatory LDA under long-distance *wh* movement fails to account for the freeness of LDA with long-distance *tama* 'where', *tayuwek* 'when', and *tan* 'how' questions. Under LeSourd's proposal, these would have to be base-generated in the matrix proleptic object position, and we would thus be forced to get LDA with them—presumably resulting in inanimate singular agreement. However, inanimate singular agreement isn't forced in these cases (277), falsifying LeSourd's account.

Bruening's (2001b) account of forced LDA is much more promising, as it derives the non-interaction with *tama* 'where', *tayuwek* 'when', and *tan* 'how' questions that LeSourd's account doesn't. Bruening's proposal falls out straightforwardly from the following three assumptions already extant in the literature:

1. Voice has a φ probe, giving us object agreement—the theme sign (a common generative Algonquian assumption; see Section 2.2.2).

2. Voice (*v* for Bruening) has an Ā probe—this is a consequence of taking Voice(/*v*) to be a phase head (Chomsky 1995, 2001, a.m.o.) and adopting a featural account of successive cyclic movement (Chomsky 1995, van Urk 2015, 2020, a.o.).

3. A head containing multiple probes is subject to an economy constraint of Multitasking (Pesetsky and Torrego 2001, van Urk and Richards 2015, Newman 2021a). For our purposes, we can understand this as the following: a head with multiple probes will prefer to value all probes with a single goal (if possible) rather than value each probe with a distinct goal.

The last assumption necessary is for this account is that LDA predicates in Passamaquoddy *always* co-occur with a φ probe on Voice.[19]

[19]This is a nontrivial assumption. Minimally, given that LDA seems to be optional in the general case, we need to

With this all in place, let's do a toy proof by contradiction to show that it's impossible for long-distance Ā movement of φ-feature-bearing *wen* 'who' and *keq* 'what' out of an epistemic LDA complement to result with LDA with another DP—at least while at the same time obeying all three of our base assumptions (in particular, Multitasking). So let's assume that this *should* actually be possible—what can we do to try and ensure this will happen? First, both the φ-bearing *wh* item and the hopeful LDA target should move to the CP edge—the *wh* item needs to move there on its way into the matrix clause due to CP being a phase, and the hopeful LDA target needs to move there in order to become visible to matrix Voice:

(279) Voice$_{[u\varphi],[u\bar{A}]}$ … [$_{CP}$ DP$_{[\varphi]}$ *wh*$_{[\varphi,\bar{A}]}$ [$_{C'}$ … *the setup*

Then, in order to get LDA with DP, the φ probe on Voice needs to Agree with it, and in order to move *wh* up higher, the Ā probe on Voice needs to Agree with *wh* and move it to the VoiceP edge:

(280) [$_{VoiceP}$ *wh*$_{[\varphi,\bar{A}]}$ [$_{Voice'}$ Voice$_{[u\varphi],[u\bar{A}]}$ … [$_{CP}$ DP$_{[\varphi]}$ *t* [$_{C'}$ … *problem!*

Herein lies the problem: to get this result, our economy assumption—the Multitasking contraint—has to be false. That's because *wh*, which bears both φ and Ā features, is able to value both probes of Voice. Thus, given Multitasking, Voice should *only* agree with *wh*, rather than valuing its probes separately with both DP and *wh*,[20] as illustrated below:

(281) [$_{VoiceP}$ *wh*$_{[\varphi,\bar{A}]}$ [$_{Voice'}$ Voice$_{[u\varphi],[u\bar{A}]}$ … [$_{CP}$ DP$_{[\varphi]}$ *t* [$_{C'}$ … *the only possibility*

Even if we did move DP into the embedded left periphery, that would have no affect on the LDA possibilities here.

Thus, the only derivation that converges given all these assumptions is the one where we get LDA with the *wh* item, correctly deriving the attested pattern. Additionally, in this system, the only way to *avoid* LDA with the *wh* item under long-distance *wh* movement is if it lacks φ features, as that would prevent Multitasking from kicking in—thus, for non-DPs like *tama* 'where', *tayuwek* 'when', and so on, we *should* actually be able to get LDA with another constituent, exactly as desired. In this respect, Bruening's account is clearly superior to LeSourd's.

However, a problem with this account (at least as it stands right now) is that it's tailor-made for the LDA behavior of epistemic LDA predicates, and is unable to derive differences in LDA behavior with different kinds of LDA predicates. And, as we'll see in the next sections, this is an undesireable outcome, since there *is* variation across different kinds of LDA predicates.

be able to specify the difference between LDA and non-LDA predicates as follows: LDA predicates *can* co-occur with a φ probe on Voice, and non-LDA predicates *cannot.* Bruening needs to actually strengthen this to the statement that LDA predicates *must* co-occur with a φ probe on Voice. If so, then we'd have to derive the optionality of LDA in the general case by saying that the lack of LDA with an LDA predicate comes from it being unable to find an accessible goal to agree with—perhaps because nothing has moved high enough in the embedded clause to come into view of matrix Voice.

[20]Doesn't DP need to have an Ā feature (e.g. a Topic feature) in order to move to embedded Spec,CP? Sure—if we grant that, then we can specify the Ā probe on Voice to be more specific—e.g. probing specifically for *wh* features, or both *wh* and Rel, etc. (see for instance Aravind 2017 on Ā feature geometries for ways to do this).

5.3.2 Complements of direct perception verbs

Turning now to complements of direct perception verbs, we'll see that their behavior under long-distance Ā extraction strikingly differs from epistemic LDA predicates—in particular, LDA is *always* free. But before we get there, let's first establish what happens with *wh* questions embedded under direct perception verbs. Just like with the epistemic LDA predicates, LDA with direct perception verbs into *wh* question complements is free—we can agree with the *wh* item (282) or another DP (283), as we wish:

(282) Agreement with *wh* phrase

a. Ø-Nomiy-**a** [$_{CJ}$ wen peneq-toho-k wikhikoneya-l].
   1-see$_{TA}$-**3obj** who ic.down-hit$_{TI}$-3cj pen-in.pl
   'I saw who knocked over the pens.' (MA 2023.06.20)

b. Ø-Nomihtu-n [$_{CJ}$ keqsey etoli= komutonato-k mahtoqehs].[22]
   1-see$_{TI}$-n what ic.prog= steal$_{TI}$-3cj rabbit
   'I saw what the rabbit stole.' (Bruening 2001b: 202)

c. Ø-Nomiy-**a-k** [$_{CJ}$ weni-k kisi= komutonatomu-hti-t man].
   1-see$_{TA}$-**3obj-prox.pl** who-prox.pl ic.pfv= steal$_{TI}$-3pl-3cj money
   'I saw who.pl stole the money.' (Bruening 2004: 233)

[22]We know that *nomihtun* 'I see it' here is showing inanimate singular agreement with *keqsey* 'what' rather agreeing with the embedded clause or exponing failed agreement because direct perception verbs seem to *require* LDA:

(i) a. Ø-Nutuw-**a** [$_{CJ}$ Tiger yali= wiwoni= qasqi-t].
   1-hear$_{TA}$-**3obj** Tiger ic.around= in.circles= run$_{AI}$-3cj
   'I hear Tiger running all around.' (GP 2023.01.30)

b. *Ø-Nutom-on [$_{CJ}$ Tiger yali= wiwoni= qasqi-t].
   1-hear$_{TI}$-n Tiger ic.around= in.circles= run$_{AI}$-3cj
   Intended: 'I hear Tiger running all around.' (GP 2023.01.30)

Apparently a similar restriction holds in Woods Cree (Starks 1995) and Plains Cree (Muehlbauer 2012):

(ii) Woods Cree obligatory LDA into direct perception complements

a. Kâ= wâpam-**â**-t [kisîðiniw-a î= pî= nâsipî-ði-t].
   kâ= see$_{TA}$-**3obj**-3cj old.man-obv e= to= go.down$_{AI}$-obv-3cj
   'He saw an old man coming down [the hill].' Woods Cree (Starks 1995: 316)

b. *Kâ= wâpamah-k [kisîðiniw-a î= pî= nâsipî-ði-t].
   kâ= see$_{TI}$-3cj old.man-obv e= to= go.down$_{AI}$-obv-3cj
   Intended: 'He saw an old man coming down [the hill].' Woods Cree (Starks 1995:316)

(iii) Plains Cree obligatory LDA into direct perception complements

a. Ni-kî= wâpam-**â**-w [Hobbes ê= cîhkêyihtah-k].
   1-pst= see$_{TA}$-**3obj**-sg Hobbes e= be.happy$_{TI}$-3cj
   'I saw Hobbes being happy.' Plains Cree (Muehlbauer 2012: 215)

(283) Agreement with another DP

a. Nil Ø-nomihtu-n-**ol** [$_{\text{CJ}}$ wen peneq-toho-k <u>wikhikoneya-l</u>].
1.SG 1-see$_{\text{TI}}$-N-**IN.PL** who IC.down-hit$_{\text{TI}}$-3CJ <u>pen-IN.PL</u>
'I saw who knocked over <u>the pens</u>.' (MA 2023.06.20)

b. Kukec-ok **nt**-iyali= kikim-apom-**oku-nnu**-k 'ciw
warden-PROX.PL 1-around= secretly-watch$_{\text{TA}}$-**INV-1PL**-PROX.PL from

puskonikon-ihkuk, [$_{\text{IND}}$ keq miyaw nt-otoli= oluk-hoti-pon].
coffin-LOC.PL what exactly 1-PROG= do$_{\text{AI}}$-PL-1PL

'Game wardens were spying on <u>us</u> from the cemetery, to see what exactly <u>we</u> were doing.' (lit. 'From the cemetery, game wardens were secretly watching what exactly <u>we</u> were doing.') https://pmportal.org/dictionary/kukec

c. ...'-koti= nomiy-**a-l** [$_{\text{IND}}$ tan 't-ol-luhka-li-n].
3-want= see$_{\text{TA}}$-**3OBJ-OBV.SG** WH 3-thus-do$_{\text{AI}}$-OBV-N
'...she wants to see what <u>he</u> does.' https://pmportal.org/dictionary/nuhsuhkuwal

I analyze this just like free LDA into epistemic *wh* complements: either the *wh* item is the highest

b. *Ni-kî= wâpahtê-n [Hobbes ê= cîhkêyihtah-k].
1-PST= see$_{\text{TI}}$-PART Hobbes E= be.happy$_{\text{TI}}$-3CJ
Intended: 'I saw Hobbes being happy.' Plains Cree (Muehlbauer 2012: 215)

Interestingly, indirect perception readings entirely ban LDA, and seem to always co-occur with the complementizer *eli* (direct perception seems to always lack *eli*):

(iv) Context: We read in the newspaper that Norvin won the lottery.

a. Ø-Nomihtu-ne-n (pilasku-k) [$_{\text{CJ}}$ Mehq-ihtuwa-t eli 'cihtihike-t kecceyawi-k man].
1-see$_{\text{TI}}$-N-1PL paper-LOC IC.red-have.beard$_{\text{AI}}$-3CJ IC.C win$_{\text{AI}}$-3CJ IC.be.many-CJ money
'We saw (in the paper) that Norvin won a lot of money.' (GP, MA 2023.02.01)

b. *Ø-Nomiy-**a**-n (pilasku-k) [$_{\text{CJ}}$ <u>Mehq-ihtuwa-t</u> eli 'cihtihike-t kecceyawi-k man].
1-hear$_{\text{TA}}$-**3OBJ**-1PL paper-LOC <u>IC.red-have.beard$_{\text{AI}}$-3CJ</u> IC.C win$_{\text{AI}}$-3CJ IC.be.many-CJ money
Intended: 'We saw (in the paper) that <u>Norvin</u> won a lot of money.' (GP, MA 2023.02.01)

There's one exception to direct perception requiring LDA: if the matrix subject hasn't actually directly perceived any of the arguments of the embedded verb, then we can have a non-agreeing matrix perception verb:

(v) a. Context: I'm in the living room, and I hear camera noises in other room. I know Gracie must be modeling for a photoshoot, even though I can't hear her.

Ø-Nutom-on [$_{\text{CJ}}$ Gracie etol-uwikh-ut].
1-hear$_{\text{TI}}$-N Gracie IC.PROG-depict$_{\text{TA}}$-X:3CJ
'I heard Gracie being photographed.' (GP, MA 2023.02.07)

b. Context: Roger has entered a raffle to win a new blender, but he can't make it to the gathering where they're going to announce the winner. I'm there, and I see them announce that Roger has won.

Ø-Nomihtu-n [$_{\text{CJ}}$ Laca weccihtah-a-t mawcoktihikoninuti-yil].
1-see$_{\text{TI}}$-N Roger IC.win$_{\text{TA}}$-3OBJ-3CJ blender-OBV.SG
'I saw Roger win a blender.' (GP, MA 2023.03.07)

In these contexts, the matrix subject doesn't actually directly perceive any of the embedded arguments (Gracie, Roger, or the blender). This apparently allows us to have a non-agreeing TI perception verb, despite a lack of inanimate arguments inside the embedded clause. I leave closer investigation and analysis of these patterns for future work.

specifier of CP, in which case we get LDA with the *wh* item, or another DP (perhaps a topic) has moved above to an even higher specifier above the *wh* phrase, and we get LDA with it instead.

Turning now to long-distance *wh* movement, let's first take a look at *wen* 'who' and *keq* 'what' questions—the ones that forced LDA with the *wh* item under long-distance movement out of epistemic complements. Strikingly, LDA here is still free:

(284) a. Weni-l Tiger nutuw-**a**-t [$_{\text{CJ}}$ etol-ewestuwam-uk]?
who-OBV.SG Tiger IC.hear$_{\text{TA}}$-**3OBJ**-3CJ IC.PROG-talk.to$_{\text{TA}}$-1SG:3CJ
'Who did Tiger hear me talking to?' (GP, MA 2023.01.31)

b. Weni-l Tiger nutuw-**i**-t [$_{\text{CJ}}$ etol-ewestuwam-uk]?
who-OBV.SG Tiger IC.hear$_{\text{TA}}$-**1OBJ**-3CJ IC.PROG-talk.to$_{\text{TA}}$-1SG:3CJ
'Who did Tiger hear me talking to?' (GP, MA 2023.01.31)

(285) a. Keq nemihtu-won [$_{\text{CJ}}$ Tiger kisi= kata-q neqiw ihtolopiyamok]?
what IC.see$_{\text{TI}}$-2SG.CJ Tiger IC.PFV= hide$_{\text{TI}}$-3CJ under couch
'What did you see Tiger hide under the couch?' (GP, MA 2023.01.31;NR)

b. Keqsey nemiy-**ot** [$_{\text{CJ}}$ mahtoqehs etoli= komutonato-k]?
what IC.see$_{\text{TA}}$-**2SG:3CJ** rabbit IC.PROG= steal$_{\text{TI}}$-3CJ
'What did you see the rabbit stealing?' (Bruening 2001:183)

In the (a) examples we're agreeing with the *wh* item, and in the (b) examples we're agreeing with the other embedded argument—both options are grammatical.

Likely unsurprisingly, this freedom extends to the non-DP *wh* questions, like *tama* 'where' questions, where it's also possible to get LDA with something other than the *wh* item:

(286) a. Tama k-nomiy-**a** [$_{\text{CJ}}$ kisi= puno-k salawey]?
where 2-see$_{\text{TA}}$-**3OBJ** IC.PFV= put$_{\text{TI}}$-3CJ salt
'Where did you see him put the salt?' (EM 2022.11.23;NR)

b. Tama k-nutuw-**a** [$_{\text{CJ}}$ kisi= puno-k piwsoq-ol]?
where 2-hear$_{\text{TA}}$-**3OBJ** IC.PFV= put$_{\text{TI}}$-3CJ firewood-IN.PL
'Where did you hear him put the firewood?' (EM 2022.11.23;NR)

Thus, with direct perception complements, no kind of Ā movement—short or long-distance—has an effect on the freeness of LDA. LDA is always free, as summarized below:

(287) Summary of interactions between LDA into a direct perception complement and *wh* mvmt.
a. embedded *wh* question (any kind): **free LDA**
b. long-distance *wen* 'who' or *keq* 'what' question: **free LDA**
c. long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: **free LDA**

Back to Bruening

Now let's return to Bruening's account of obligatory LDA with *wh* items under long-distance *wh* movement. The observation is simply that Bruening's account extends to direct perception complements, where he also predicts obligatory LDA with *wen* 'who' and *keq* 'what' under long-distance *wh* movement, counter to fact. Both Bruening (2001b: 183, fn. 33) and LeSourd (2019a: 392) point out this defect of the theory, and Bruening tries to explain it by suggesting that the LDA target of a direct perception verb is a thematic object of the matrix verb. One reason to think that this isn't true is that if the LDA target *were* a matrix thematic object, we'd expect to be able to reflexivize on it. However, this appears to be impossible (just like with all other LDA predicates, fn. 13):

(288) *Psi=te Ø-nomiy-**usi**-pon [$_{CJ}$ etoli= komuci= tpinuw-i-nokot Tiger].
all=EMPH 1-see$_{TA}$-**REFL**-1PL IC.PROG= secretly= watch$_{TA}$-1OBJ-3:1PL.CJ Tiger
Intended: 'We all see <u>ourselves</u> being watched by Tiger.' (GP, MA 2023.02.01)

Thus, this is a real challenge for Bruening's account. Later in this chapter, I'll present how we can extend Bruening's account in order to correctly capture the variation with different kinds of LDA complements by varying the size of each kind of complement.

5.3.3 Subordinative complements

But before we get there, let's lastly take a look at how subordinative LDA interacts with Ā movement. Recall *(i)* that subordinative LDA is restricted to the embedded argument in the highest A position, and *(ii)* that we cannot have true subordinative *wh* questions. Thus, we can only look at long-distance *wh* questions out of subordinative LDA complements. Strikingly, here the LDA pattern is still restricted to the highest A position, even if we're *wh* moving another argument:

(289) a. Weni-l Roger pawatom-uw-**i**-t [$_{SUB}$ nt-olewestuwam-a-n]?
who-OBV.SG Roger IC.want$_{TI}$-APPL-**1OBJ**-3CJ 1-talk.to$_{TA}$-3OBJ-N
'Who did Roger want <u>me</u> to talk to?' (EM 2022.12.07)

b. *<u>Weni-l</u> Roger pawatom-uw-**a**-t [$_{SUB}$ nt-olewestuwam-a-n]?
<u>who-OBV.SG</u> Roger IC.want$_{TI}$-APPL-**3OBJ**-3CJ 1-talk.to$_{TA}$-3OBJ-N
Intended: '<u>Who</u> did Roger want me to talk to?' (EM 2022.12.07)
EM: "It doesn't make sense because you're talking about yourself here."

(290) a. Tan wot olomuss pawatom-uw-**i**-t Kolel [$_{SUB}$ Ø-nat-som-a-n]?
WH this.PROX.SG dog IC.want$_{TI}$-APPL-**1OBJ**-3CJ Clara 1-go-feed$_{TA}$-3OBJ-N
'Which dog did Clara want <u>me</u> to go feed?' (EM 2022.12.07)

b. *Tan wot <u>olomuss</u> pawatom-uw-**a**-t Kolel [$_{SUB}$ Ø-nat-som-a-n]?
WH this.PROX.SG <u>dog</u> IC.want$_{TI}$-APPL-**3OBJ**-3CJ Clara 1-go-feed$_{TA}$-3OBJ-N
Intended: '<u>Which dog</u> did Clara want me to go feed?' (EM 2022.12.07)

(291) a. Weni-l kisiht-uw-**i**-t Roger [$_{\text{SUB}}$ nt-olewestuwam-a-n]?
who-OBV.SG IC.make$_{\text{TI}}$-APPL-**1OBJ**-3CJ Roger 1-talk.to$_{\text{TA}}$-3OBJ-N
'Who did Roger make <u>me</u> talk to?' (EM 2022.12.07)

b. *<u>Weni-l</u> kisiht-uw-**a**-t Roger [$_{\text{SUB}}$ nt-olewestuwam-a-n]?
<u>who-OBV.SG</u> IC.make$_{\text{TI}}$-APPL-**3OBJ**-3CJ Roger 1-talk.to$_{\text{TA}}$-3OBJ-N
Intended: '<u>Who</u> did Roger make me talk to?' (EM 2022.12.07)

In these sentences, the (a) examples feature LDA with the embedded external argument, and the (b) examples feature LDA with the *wh* item, originally the embedded internal argument. Only the (a) examples are grammatical.

Somewhat trivially, this also extends to *tama* 'where', *tayuwek* 'when', and *tan* 'how' questions, where we still get LDA with the embedded subject:

(292) a. Tama Gracie **n**-pawatom-a-**ku**-ne-**n** [$_{\text{SUB}}$ n-punom-one-n samaqan]?
where Gracie **1**-want$_{\text{TI}}$-APPL-**INV**-N-**1PL** 1-put$_{\text{TI}}$-N-1PL water
'Where does Gracie want <u>us</u> to put the water?' (MA 2023.06.20)

b. Tayuwek k-muhsums **k**-pawatom-a-**ku**-n [$_{\text{SUB}}$ k-naci= wikuwamkom-a-n]?
when 2-grandfather **2**-want$_{\text{TI}}$-APPL-**INV**-N 2-go= visit$_{\text{TA}}$-3OBJ-N
'When does your grandfather want <u>you</u> to visit him?' (MA 2023.06.20)

c. Tan k-tuci= pawatom-uw-**a**-n [$_{\text{SUB}}$ '-kakawi= qasqi-n]?
WH 2-much= want$_{\text{TI}}$-APPL-**3OBJ**-N 3-fast= run$_{\text{AI}}$-N
'How fast do you want <u>him</u> to run?' (MA 2023.02.21;NR)

No matter what—whether there's Ā movement involved or not—subordinative LDA remains restricted, only possible with the embedded argument in the highest A position.

(293) Summary of interactions between LDA into a subordinative complement and *wh* mvmt.

a. embedded *wh* question (any kind): **N/A**
b. long-distance *wen* 'who' or *keq* 'what' question: **highest A pos.**
c. long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: **highest A pos.**

5.3.4 Reducing variation in LDA to variation in clause size

So this is the challange: how do we capture the varying behavior of LDA with these three different classes of LDA predicates and complements, summarized in Table 5.1? Bruening's (2001b) analysis is designed to capture the top row of this table, but it's not fine-grained enough to be able to capture the variation across rows. Here, I extend his analysis by considering the syntax of the complement clause—in particular, its size.

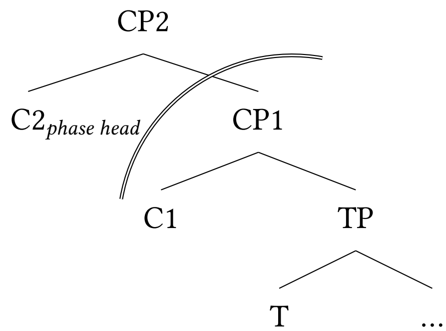
In line with what Carstens and Diercks (2013) propose for Bukusu (Bantu, JE.31c), I'll distinguish between two CP layers which I'll simply label CP1 and CP2, with CP2 dominating CP1.[23] Just like them, I claim that C2 is a phase head whereas C1 is not:

[23]Within Rizzi's (1997) exploded left periphery, I think it's reasonable to equate CP2 with ForceP and CP1 with

	embedded decl.	embedded *wh*	LD *wen*, *keq*	LD *tama*, *tayuwek*, *tan*
Epistemic	free	free	*wh* only	free
Perception	free	free	free	free
Subordinative	highest A	N/A	highest A	highest A

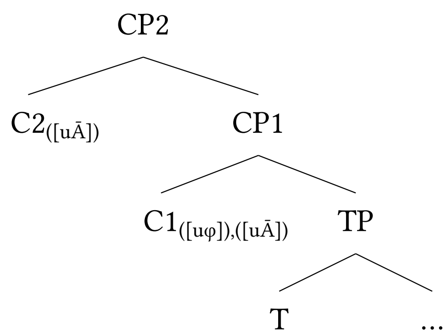
Table 5.1: Summary of the three LDA patterns

(294)



An additional assumption I make is that both C1 and C2 in Passamaquoddy can carry Ā probes, but T cannot. Additionally, the head corresponding to peripheral agreement is C1, and thus C1 also carries a φ probe (obligatorily in the independent, and optionally in the conjunct):

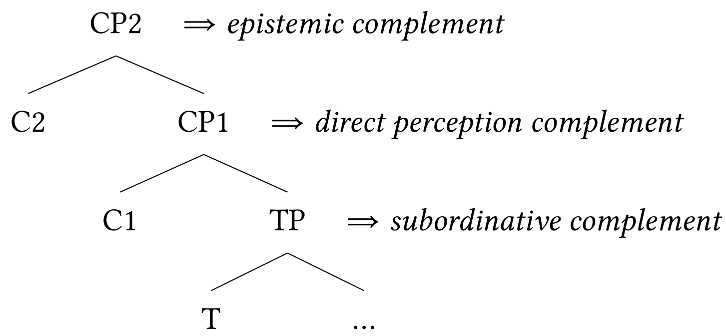
(295)



The point of all this is that we can then define three different sizes of clauses monotonically: those containing all of CP2, CP1, and TP, those containing CP1 and TP, and finally those that contain only TP. I propose that these three sizes of clauses map on exactly to the three kinds of complements we've looked at here: epistemic complements are CP2-sized, direct perception complements are CP1-sized, and subordinative complements are TP-sized:

FinP, or perhaps even FinP plus optionally any number of TopP and FocP projections. However, I won't investigate more precisely here the issue of what CP1 and CP2 should be labeled, and I leave this aside for future work.

(296)



In earlier parts of this chapter we've just made a coarse distinction between TP-sized subordinatives and CP-sized conjunct and independent clauses—here I'm making a finer split between different sizes of independent and conjunct clauses.

With this structure of the left periphery thus set up, we can now turn to accounting for the three LDA behaviors in Table 5.1. Essentially, they will all fall out naturally from combining Bruening's analysis together with this variation in clause structure between different kinds of LDA complements. Let's go from smallest to largest.

Deriving properties of subordinative LDA

Let's first list all the properties of subordinative LDA that we'd like to account for:

(297) Subordinative LDA

a. embedded declarative: **highest A pos.**

b. embedded *wh* question (any kind): **N/A**

c. long-distance *wen* 'who' or *keq* 'what' question: **highest A pos.**

d. long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: **highest A pos.**

Subordinative clauses are bare TPs—this has been one of the core conclusions I've been arguing for in this chapter. If only CP layers are able to host Ā probes, and subordinative clauses lack CP layers, then we can capture all of the above properties of subordinative LDA.

- **Embedded declarative: highest A position.** Since subordinative clauses lack any CP layers, they can't host any Ā probes that could move something about what is already located in the highest A position. Thus, subordinative LDA is restricted to the embedded external argument, except in the third person inverse, where you get LDA with the embedded internal argument.

- **Embedded *wh* question: doesn't exist.** Since subordinative clauses lack any CP layers, they can't host *wh* probes, and we cannot have a genuine subordinative *wh* question. By extension, we can't have an embedded subordinative *wh* question.

- **Long distance *wen* 'who' or *keq* 'what' question: highest A position.** Since subordinative clauses lack any CP layers, they lack the following two properties: they do not have a phase edge at their edge (perhaps there is a VP phase, but that would be too low), nor can they host any Ā probes at their edge that might drive successive-cyclic movement. Thus, if *wen* 'who' or *keq* 'what' originates low in a subordinative clause (i.e. not in the highest A position) and needs to move out long-distance, it doesn't need to stop off at the edge of the subordinative clause (because there's no phase there), and, moreover, it *cannot*, as there are no Ā probes there either. A corollary of this is that long-distance Ā movement out of a subordinative clause doesn't proceed successive-cyclically through its edge—rather, you move directly into the next clause up (perhaps from the lower VP phrase edge). In this way, long-distance Ā movement out of a subordinative clause won't have a chance to affect LDA patterns, and we preserve the normal highest A position LDA pattern.

- **Long distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: highest A position.** The same reasoning as the bullet point above explains why we also get the highest A position LDA pattern with *tama* 'when', *tayuwek* 'when', and *tan* 'how' questions.

Deriving properties of direct perception LDA

Summarizing the *explananda* of direct perception LDA:

(298) Direct perception LDA

a.	embedded declarative:	**free LDA**
b.	embedded *wh* question (any kind):	**free LDA**
c.	long-distance *wen* 'who' or *keq* 'what' question:	**free LDA**
d.	long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question:	**free LDA**

I propose that direct perception complements are small CPs: they're CP1-sized, without a CP2 layer. This means that they can host Ā probes (in C1), but there is no CP phase (as they lack CP2). Here's how this accounts for these various properties:

- **Embedded declarative: free LDA.** Since direct perception complements are large enough to contain CP1, they are able to host Ā probes at their left edge, allowing for LDA to show Ā locality properties—free LDA.

- **Embedded *wh* question: free LDA.** If we assume that it's possible to Ā move to a higher specifier than that occupied by a *wh* phrase (e.g. moving a topic), then we can preserve free LDA with *wh* complements of direct perception verbs.

- **Long distance *wen* 'who' or *keq* 'what' question: free LDA.** Since direct perception complements lack CP2, they are not phasal. Thus, long-distance Ā extraction is not forced to successive-cyclically stop off at the left edge of a direct perception complement. Because of this, we can ensure that a *wh* item stays low enough that another embedded argument is able to be the target of LDA, before later moving up into the matrix clause, preserving the free LDA pattern.

- **Long distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: free LDA.** The same reasoning as the bullet point above applies here as well.

It's important to notice that it's precisely the lack of CP2—the lack of a phasal CP layer—that preserves the free LDA pattern under long-distance Ā extraction out of direct perception complements.

Deriving properties of epistemic LDA

Finally, let's turn to epistemic LDA, whose properties are as follows:

(299) Epistemic LDA

a.	embedded declarative:	**free LDA**
b.	embedded *wh* question (any kind):	**free LDA**
c.	long-distance *wen* 'who' or *keq* 'what' question:	***wh* only**
d.	long-distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question:	**free LDA**

Epistemic complements are the largest size of clause: a CP2. As such, they can both host Ā probes, like direct perception complements, and they additionally constitute a phase, unlike the other two complement types we've looked at. As we'll see, these are the two crucial properties that allow for Bruening's account to go through.

- **Embedded declarative: free LDA.** Since epistemic complements have CP layers, they are able to host Ā probes at their left edge, allowing for LDA to show Ā locality properties—free LDA.

- **Embedded *wh* question: free LDA.** If we assume that it's possible to Ā move to a higher specifier than that occupied by a *wh* phrase (e.g. by moving a topic), then we can preserve free LDA with *wh* complements of direct perception verbs.

- **Long distance *wen* 'who' or *keq* 'what' question: LDA with *wh* phrase only.** Since C2 is a phase head, a *wh* item that's destined to move further must stop off at Spec,CP2. Because of this, the *wh* item is accessible to matrix Voice for LDA—and, because *wen* 'who' and *keq* 'what' have φ features, Multitasking kicks and and forces Voice to Agree with the *wh* item to satisfy both its Ā and φ probes. The crucial property that allows for this Bruening-style account to go through here but not in direct perception complements is the difference in phasality of the complement: epistemic complements are larger and phasal, forcing succesive-cyclic movement, but direct perception complements are smaller and non-phasal, allowing you to avoid successive-cyclic movement and thus avoid Multitasking kicking in to force LDA with the *wh* item.

- **Long distance *tama* 'where', *tayuwek* 'when', or *tan* 'how' question: free LDA.** Though *wh* items like *tama* 'where', *tayuwek* 'when', and *tan* 'how' have to stop off in Spec,CP2 on their way into the matrix clause, their lacking φ features prevents Multitasking from kicking in, preserving the free LDA pattern.

As we can see, the LDA behavior with epistemic complements is almost exactly the same as that of direct perception complements—free LDA (almost) everywhere—which is a result of the existence of CP layers to host Ā probes in both sizes of clause. The difference between the two—the behavior of long-distance *wen* 'who' and *keq* 'what' questions—arises from the difference in phasality between the two kinds of complements.

Shifting our point of view slightly, we can see that varying the clause size between these three complement types gives us two different kinds of "toggles" that I've used to capture their varying properties. The first toggle is the presence/absence of CP layers (CP1 and CP2), which endows direct perception complements and epistemic complements with the free LDA pattern, and derives the restricted LDA pattern of subordinative complements, since they lack CP layers entirely. The second toggle is the presence/absence of CP2, which hosts the phase head C2, and regulates the behavior of LDA under long-distance *wh* movement of *wen* 'who' and *keq* 'what' following Bruening's economy-based account of obligatory LDA under long-distance Ā extraction. Since only epistemic complements have CP2, only there will you get a distinct agreement pattern under long-distance movement of *wen* 'who' and *keq* 'what'—in direct perception and subordinative complements, which lack CP2, the LDA pattern in all cases is identical, either free everywhere or restricted everywhere.

A note about Multitasking, derivational steps, and multiple specifiers

As a final note, I would like clarify an aspect of the mechanics of the Multitasking part of my proposal, which I have so far been very informal about. The crucial question is *which* goals exactly compete for the evaluation of Multitasking. In the analysis presented so far, we've needed the Multitasking logic to be triggered when we have multiple (co-)specifiers of the same head. However, we don't want Multitasking to kick in if, say, in a (nonphasal) direct perception complement we have a topicalized DP in Spec,CP1 and a *wh* phrase in the lower phase edge, Spec,VoiceP: we want to still be able to get LDA with the topicalized DP. For the purposes of Multitasking, then, matrix Voice needs to be somewhat "blind": when it looks at Spec,CP1, it cannot yet know that there's a *wh* phrase potentially hosting both *wh* and φ features lower down.

In van Urk and Richards's (2015) formulation of Multitasking, there's a crucial part that restricts the economy evaluation to occur "at every step in a derivation" (emphasis mine):

(300) **Multitasking**

At every step in a derivation, if a probe can trigger two operations A and B, and the features check by A are a superset of those checked by B, the grammar prefers A.

(van Urk and Richards 2015: 132)

What counts as a single step of a derivation—more specifically, what is a single step in a probe's search algorithm? For our purposes, Agree needs to be somewhat strictly cyclic: probing Spec,CP1 must occur at a derivationally prior step to probing Spec,VoiceP. However, probing multiple specifiers of Spec,CP2 must occur in the same derivational step. We thus need to say that probing multiple specifiers of a single head occurs at once, in parallel—in other words, this analysis requires that a (multiple-specifier type of) Equidistance (Chomsky 1995, 2000, Ura 1996, Hornstein 2009, Longenbaugh and Polinsky 2018, a.o.) constrain the evaluation of Multitasking.

5.4 Conclusion

In this chapter, I've argued that that subordinative clauses are TP-sized, lacking CP layers entirely, and independent and conjunct clauses are CP-sized. The main evidence here for these conclusions was the behavior of various kinds of Ā movement—both those with a clear surface syntactic signature like *wh* movement and relativization, as well as those diagnosable by other means, like LDA. I showed that independent and conjunct clauses robustly participate in all kinds of Ā phenomena, whereas subordinative clauses fail to do so.

Then, I examined interactions between LDA and Ā extraction, in particular long-distance Ā movement. In doing so, we discovered that independent and conjunct clauses split into (at least) two distinct categories: those that are CP1 sized, large enough to contain Ā probes at their edge but small enough to not be phasal (like direct perception complements), and those that are CP2 sized, large enough to contain Ā probes at their edge as well as large enough to be phasal (like epistemic complements).

Here I used Ā phenomena as a diagnostic tool to uncover variation in clause size, under the (justified, I think) assumption that CP (but not TP, or other TAM-related projections) is crucially implicated in Ā dependencies. This allowed us to show that different kinds of syntactic contexts involves different sizes of clauses—like certain kinds of coordinations (subordinative coordinations), different kinds of clausal complements, and so forth. However, I have not examined *why* we get these different sizes of clauses in these different syntactic contexts. It is this question that we now turn to in the next chapter.

Chapter 6

The distribution of clauses

We now turn to the distribution of various types of independent, conjunct, and subordinative clauses in both complementation and coordination.[1] In the domain of complementation, I will discuss how the distribution of various sizes of clauses in Passamaquoddy, which we've diagnosed in the previous chapter, compares to Wurmbrand and Lohninger's (2023) proposal for the crosslinguistic typology of the size of complements. Passamaquoddy essentially perfectly obeys their generalizations, lending further support to their claims. In the domain of coordination, I closely study the difference between MATCHING COORDINATION, where the clause types of both conjuncts are the same, and SUBORDINATIVE COORDINATION, where the clause type of the second conjunct is subordinative. I show that the difference seems to boil down to a difference in SYMMETRIC versus ASYMMETRIC coordination (where a coordination *p and q* is symmetric if *p and q* entails *q and p* and vice versa, and asymmetric otherwise). I then show that Bjorkman's (2012, 2013) proposal that asymmetric coordination has the syntax of TP coordination rather than CP coordination helps us understand the behavior of subordinative coordination in Passamaquoddy, and end by discussing a few loose ends and open questions to be addressed by future work.

6.1 Complementation

The plan for this section is to first summarize the main conclusions of Wurmbrand and Lohninger (2023), and then show how their tripartite cline of complement types—proposition, situation, and event—is expressed in Passamaquoddy. I end by presenting some remaining issues and questions and discuss possible paths forward. The core contribution of this section is to show that the sizes of clauses we've diagnosed in Chapter 5 allow us to understand why it is that different clause types have the distribution they do in complementation, as Passamaquoddy clausal complementation essentially exactly follows Wurmbrand and Lohninger's generalizations and proposals.

[1]Unfortunately, I don't examine the important issue of the independent-conjunct contrast in *wh* movement, an issue I leave aside for future research. See Richards (2004) for some discussion of this issue in Wampanoag, to which Passamaquoddy bears a few similarities but also several differences.

6.1.1 Wurmbrand and Lohninger (2023)

Wurmbrand and Lohninger (2023) are interested in the question of how to best understand the distribution of structurally-reduced clauses, both within and across languages. They build on work that seeks to link clausal reduction to the semantics of the embedding context (e.g. Givón 1980, a.m.o.), where different predicates tend to embed different sizes of clauses. They propose the following three-step cline of complement types, which they term the Implicational Complementation Hierarchy:

(301) **Implicational Complementation Hierarchy**

most independent		least independent
least transparent	Proposition $\gg$ Situation $\gg$ Event	most transparent
least integrated		most integrated

They describe these three different classes of clausal complements—proposition, situation, and event—as follows, borrowing insights from Ramchand and Svenonius (2014):

- **Proposition complements** are found under speech and epistemic predicates, can be evaluated for truth, and are temporally independent from the matrix event time; these are the most "fully-finite" kinds of complements.

  Examples: admit, affirm, announce, assume, believe, claim, consider, discover, figure, find, forget (factive), imagine, know (factive), observe, say, suppose, tell (speech), wager

- **Situation complements** involve emotive and irrealis contexts, can't really be evaluated for truth, and are often temporally dependent on the matrix predicate, most commonly (but not always) future-shifted with respect to the matrix event time.

  Examples: agree, ask, choose, decide, demand, desire, know (modal), need, plan, promise, refuse, tell (imperative), want, wish

- **Event complements** are found under implicative, aspectual, and modal verbs, and are completely temporally dependent on the matrix event time.

  Examples: avoid (implicative), begin, can, continue, fail, finish, forget (implicative), manage, may, must, start, stop, succeed, try

Following Ramchand and Svenonius (2014), the idea is that these three different kinds of clausal complements correspond to three different semantic "sorts" (or types): events, situations, and propositions. For them, events are atemporal versions of the classic Davidsonian conception of events, characterizeable by lexical aspect (dynamic/stative, telic/atelic) and thematic roles (which relate events to individuals). Building up from there, situations are spatiotemporally and world-anchored elaborations of events, and propositions are situations that are related to an utterance situation (or, perhaps more broadly, situations related/anchored to an attitude holder[2]). In the syntax, the VP domain is the domain of events, TP the domain of situations, and CP the domain of propositions.

[2]Related to this idea is the proposal to sever the intensionality (modal displacement) of certain attitude predicates from the predicate itself, and instead introduce intensionality within the complement using a CP-domain operator (Kratzer 2006, Moulton 2009, 2015, Bogal-Albritten 2016, Elliott 2020, Bondarenko 2022, a.o.).

Wurmbrand and Lohninger (2023) extend this idea to the domain of clausal complementation. They propose that certain kinds of predicates, by virtue of their meaning, must embed clauses that correspond to these different sorts: certain predicates describe relationships between an individual and a proposition, others between an individual and a situation, and others a relationship between an individual and an event. The insight is that this semantic idea can link to the syntax via Ramchand and Svenonius's (2014) sortal domains: proposition complement predicates like *say*, *believe*, and *know* must contain a semantically-contentful CP domain in order for the complement to denote a proposition; situation complement predicates like *decide*, *want*, and *order* must contain a semantically-contentful TP domain in order for the complement to denote a situation; and event complement predicates like *begin*, *manage*, and *try* must contain a semantically-contentful VP domain in order for the complement to denote an event.

A crucial component of Wurmbrand and Lohninger's proposal is the idea that layers of syntactic structure need not be semantically-contentful—they could in principle be semantically vacuous (e.g. denoting an identity function). Granting this, it would thus be possible for an event complement to be TP or even CP-sized, as long as the TP and CP domains were semantically vacuous, allowing the clause to remain a predicate of events. Similarly, it would be possible for a situation complement to be CP-sized as long as CP was also semantically vacuous. This doesn't render Wurmbrand and Lohninger's proposal nonrestrictive, as their analysis places *minimum* bounds on the size of different kinds of complements: event complements must minimally be VP-sized, situation complements must minimally be TP-sized, and proposition complements must minimally be CP-sized. They argue that this is exactly the kind of restrictiveness needed to capture the crosslinguistic variation found in clausal reduction in different attitude contexts. The Implicational Complementation Hierarchy is a cline of structural reduction, with complements types on the right being more structurally-reduced than (or the same size as) those on the left.

With this background in place, let's now turn to the Passamaquoddy data. We'll take a look at each of Wurmbrand and Lohninger's complement types, examining whether they embed independent, conjunct, or subordinative complements. The striking conclusion will be that propositional complements are *all* independent or conjunct (the CP-sized clause types, as we learned in the previous chapter), and situation and event complements are overwhelmingly often subordinative (the TP-sized clause type), with a handful being conjunct. Thus, Passamaquoddy provides support for the Implicational Complementation Hierarchy.

6.1.2 Proposition complements

When examining attitude predicates that embed proposition complements, we find two classes: a small class containing predicates that preferentially embed independent, but occasionally can also be found embedding conjunct, and a larger class containing predicates that generally embed conjunct, but occasionally can also be found embedded independent. We can call these INDEPENDENT-PREFERRING and CONJUNCT-PREFERRING predicates, respectively. There are also a few "leftover" predicates (namely *ulamsotomon* 'believe' and *'tiyal* 'tell someone (that)') which seem to have a pretty even split between independent and conjunct complements, from the data available to me. Notably, none of these predicates embed subordinative.

The independent-preferring predicates are *itom* 'say' and *litahasu* 'think', as exemplified below in (302):

(302) Independent-preferring proposition complement predicates

a. **Itom-Ø-uk** [$_{\text{IND}}$ Koluskap qon-enskosu-Ø tokkiw aluhk-ihkuk].
say$_{\text{AI}}$-3-PROX.PL Koluskap much-be.tall$_{\text{AI}}$-3 until cloud-LOC.PL
'They **say** Koluskap is so tall he reaches the clouds.'
https://pmportal.org/dictionary/qonenskosu

b. **Nt-olitahasi-hpon** [$_{\text{IND}}$ k-naci= wit-k].
1-think$_{\text{AI}}$-PRET 2-go= with-dance$_{\text{AI}}$
'I **thought** you were going to a dance.' https://pmportal.org/dictionary/witka

In most cases, these verbs embed independent, and sometimes in elicitation speakers will reject conjunct complements—or at least judge them less natural than independent complements. However, speakers do occasionally produce and accept conjunct complements to these verbs, and it's possible to find conjunct under *itom* 'say' and *litahasu* 'think' in the corpus:

(303) *itom* 'say' and *litahasu* 'think' with conjunct

a. 'Pakotahsu-Ø neke **ito-k** [$_{\text{CJ}}$ eli kin-hoka-t].
lie$_{\text{AI}}$-3 back.then **say$_{\text{AI}}$-3CJ** IC.C big-have.body$_{\text{AI}}$-3CJ
'She lied when she **said** she was pregnant.' https://pmportal.org/dictionary/pakotahsu

b. **Nt-olitahas** [$_{\text{CJ}}$ olomuss-ol eyw-a-t].
1-think$_{\text{AI}}$ dog-OBV.SG IC.have$_{\text{TA}}$-3OBJ-3CJ
'I think he has a dog.' (GP 2020.12.08)

On the whole though, it's more common for *itom* 'say' and *lithasu* 'think' to embed independent. This preference for independent complements is likely related to the fact that 'say' and 'think' are predicates that typically allow for embedded main clause phenomena crosslinguistically.[3]

The remainder of proposition complement predicates (perhaps with a handful that are more difficult to categorize, which we'll get to shortly) seem to more commonly take conjunct complement. A non-exhaustive list of such verbs includes: *akonimsu* 'admit, confess', *ikonewe* 'deny', *messuwi-nsotuhmon* 'announce', *'kocicihtun* 'know (factive)', *unitahasin* 'forget (factive)', *wewitahatomon* 'remember (factive)', *mihqitahatomon* 'remember, recall (factive)', and *moskomon* 'find (that)'. I exemplify each of these below:

(304) Conjunct-preferring proposition complement predicates

a. Mam=ote **akonimsu-Ø** [$_{\text{CJ}}$ kisi= wapol-ewesta-q not skinuhsis].
finally=EMPH **admit$_{\text{AI}}$-3** IC.PFV= wrong-speak$_{\text{AI}}$-3CJ that.PROX.SG boy
'That boy finally **admitted** having spoken incorrectly.'
https://pmportal.org/dictionary/akonimsu

b. **Ikonewi-Ø-hik** [$_{\text{CJ}}$ eli kisi= tuw-apotomu-hti-t elomalokahk aluhk-ok].
deny$_{\text{AI}}$-3-PROX.PL IC.C PFV= through-look$_{\text{TI}}$-3PL-3CJ hole cloud-LOC
'They **denied** that they had looked through the hole in the cloud.'
https://pmportal.org/dictionary/tuwapotomon

[3]Similarly, as Valentine (2001: 669) notes, verbs of saying and thinking in Ojibwe also often embed independent, whereas usually complement clauses are conjunct (there is no subordinative in Ojibwe).

c. **Messuwi= nsotuw-a** [$_{\text{CJ}}$ sakom kisi= nipuwi-t].
openly= mention$_{\text{TA}}$-3OBJ chief IC.PFV= be.married$_{\text{AI}}$-3CJ
'It was **revealed** that the chief had married.'
https://pmportal.org/dictionary/messuwi-nsotuwal-messuwi-sotuwal

d. **N-kocicihtu-n** [$_{\text{CJ}}$ eli =hc kikuh-us-k kiwhosuwasq].
1-know$_{\text{TI}}$-N IC.C =FUT heal$_{\text{TA}}$-2OBJ-3CJ flagroot
'I **know** that flagroot will heal you.' (GP, MA 2022.05.16)

e. **N-unitahasi-n** [$_{\text{CJ}}$ Piyel keti= sukolopan-ke-t].
1-forget$_{\text{AI+O}}$-N Peter IC.going.to= cake-make$_{\text{AI}}$-3CJ
'I **forgot** that Peter was going to make a cake.' (GP, MA 2023.05.02)

f. **N-wewitahatom-on** [$_{\text{CJ}}$ eli n-qoss cuwi= li-y-a-t sukolopanis-`].
1-remember$_{\text{TI}}$-N IC.C 1-son must= thus-make$_{\text{TA}}$-3OBJ-3CJ cookie-OBV.PL
'I **remembered** that my son had to make cookies.' (EM 2023.06.13)

g. **N-mihqitahatom-on** [$_{\text{CJ}}$ eli Piyel cuwi= l-ewestuwam-a-t Sapet-ol].
1-recall$_{\text{TI}}$-N IC.C Peter must= thus-talk.to$_{\text{TA}}$-3OBJ-3CJ Elizabeth-OBV.SG
'I **remembered** that Peter has to talk to Elizabeth.' (EM 2023.05.09;NR)

h. Anqoc wen **nt-oli= mskuw-a** [$_{\text{CJ}}$ eci= ksiyaqsi-t].
sometimes who **1-thus= find$_{\text{TA}}$-3OBJ** IC.much= like.children$_{\text{AI}}$-3CJ
'Sometimes I **find** that someone loves children very much.'
https://pmportal.org/dictionary/ksiyaqsu

While these will generally embed conjunct, it's possible to occasionally find them embedding independent, both in elicitation as well as in the corpus:

(305) a. Weckuw-apo-k **n-kocicihtu-n** [$_{\text{IND}}$ temonu=te nt-ahcuwi= nat-oluhk].
IC.to.here-dawn$_{\text{II}}$-CJ **1-know$_{\text{TI}}$-N** later=EMPH 1-must= go-work$_{\text{AI}}$
'As dawn approaches, I **know** I'll have to go to work soon.'
https://pmportal.org/dictionary/ckuwapon

b. Piyel **Ø-unitahasi-n** [$_{\text{IND}}$ ma=te 't-ahcuwi= apenkatomu-w-on].
Peter **3-forget$_{\text{AI+O}}$-N** NEG=EMPH 3-must= pay.for$_{\text{TI}}$-NEG-N
'Peter **forgot** that he didn't have to pay for it [the car].' (RP 2020.06.17;EN)

c. Kenuk **n-wewitahatom-on** [$_{\text{IND}}$ miyaw-omahtu-Ø-hpon].
but **1-remember$_{\text{TI}}$-N** nice-behave$_{\text{AI}}$-3-PRET
'But I **remember** her as being friendly.' https://pmportal.org/dictionary/miyawomahtu

However, impressionistically, these predicates do appear to more often take conjunct complements.

There are two predicates that, in the data I've looked at, seem to have a more even split between independent and conjunct complements: *'tiyal* 'tell someone (that)' and *ulamsotomon* 'believe' (note the semantic similarity to *itom* 'say' and *litahasu* 'think'):

(306) *'tiyal* 'tell someone (that)' embedding independent and conjunct

a. …**'t-iy-uku-l** [$_{\text{IND}}$ ckuw-yewi-w ship el-kihqah-k].
3-tell$_{\text{TA}}$-INV-OBV.SG to.here-go$_{\text{II}}$-3 ship IC.thus-be.big$_{\text{II}}$-CJ
'…she **told** her that a big ship came.' https://pmportal.org/dictionary/ckuwyewiw

b. Piyel **'t-iy-a-l** Tepit-ol [$_{\text{CJ}}$ eli skat kisi= oli-ya-h-q
Peter **3-tell$_{\text{TA}}$-3OBJ-OBV.SG** David-OBV.SG IC.C NEG can= there-go$_{\text{AI}}$-NEG-3CJ
Kelis-k].
Calais-LOC
'Peter **told** David that he (Peter) couldn't go to Calais.'
https://pmportal.org/dictionary/iyal

(307) *ulamsotomon* 'believe' embedding independent and conjunct

a. **Ø-Ulamsotom-on** [$_{\text{IND}}$ wen pekitonike-t cu =oc tama 'toqiw
3-believe$_{\text{TI}}$-N who IC.request.help$_{\text{AI}}$-3CJ then =FUT somehow
kis-aposu-Ø].
PFV-be.safe$_{\text{AI}}$-3
'He **believes** that when one requests help through prayer he or she will somehow be saved.' https://pmportal.org/dictionary/pokitonike

b. **N-ulamsotom-on** =ote =na, [$_{\text{CJ}}$ kamotu kesinuhka-t].
1-believe$_{\text{TI}}$-N =EMPH =ADD suddenly IC.be.sick$_{\text{AI}}$-3CJ
'And I **believe** it, that she got sick all of a sudden.'
https://pmportal.org/dictionary/wolame

All in all, proposition complement predicates in Passamaquoddy can embed independent and conjunct. Different predicates seem to have different gradient preferences: certain predicates, like *itom* 'say' and *litahasu* 'think', prefer independent (but can also embed conjunct sometimes); others, like *'kocicihtun* 'know', *unitahasin* 'forget', and *wewitahatomon* 'remember' (among others), prefer conjunct (but can also embed independent sometimes); and a few seem less picky, like *'tiyal* 'tell someone (that)' and *ulamsotomon* 'believe'. In the future, it would be interesting to see a more quantitative study on the frequency of independent vs. conjunct embedding per each proposition complement verb.

However, strikingly, proposition complements are *never* subordinative in Passamaquoddy. I suggest that this is a principled gap, and we can understand it with all the tools I've introduced so far. In Chapter 5, I extensively argued that subordinative clauses are bare TPs, lacking CP layers. If we combine that observation with Wurmbrand and Lohninger's (2023) proposal that proposition complements are minimally CP-sized, we immediately and quite naturally derive this gap—subordinative clauses cannot be proposition complements because they fail to meet the minimum size requirements. In this way, Passamaquoddy provides strong support for the Implicational Complementation Hierarchy.

6.1.3 Situation complements

Turning now to situation complement predicates, we find that the vast majority of them embed subordinative complements. Below, I exemplify with the following (nonexhaustive) list of verbs: *ulitahatomon* ‘agree’, *’toqecimal* ‘ask someone (to)’, *ahsimal* ‘convince, persuade’, *’kisitahatomon* ‘decide, think to’, *’pecitahatomon* ‘decide, come to think’, *olsuwasu* ‘plan’, *’tosahmon* ‘refuse’, *’tiyal* ‘tell someone (to)’, *’tolokimal* ‘order’, and *’pawatomon* ‘want’:

(308) Subordinative situation complement predicates

a. **Ø-Ulitahatom-on** [$_{\text{SUB}}$ mace-ph-a-n].
3-agree$_{\text{TI}}$-N away-take$_{\text{TA}}$-3OBJ-N
‘He was **willing** to be taken away.’ https://pmportal.org/dictionary/ulitahatomon

b. Susehp **’t-oqecim-a-l** Tepit-ol [$_{\text{SUB}}$ Ø-naci= cuspes-ka-ni-ya].
Joseph **3-ask$_{\text{TA}}$-3OBJ** David-OBV.SG 3-go= porpoise-hunt$_{\text{AI}}$-N-PL
‘Joseph **asks** David to go porpoise-hunting.’ https://pmportal.org/dictionary/oqecimal

c. Roger **’-kisi= ahsim-a-l** Can-ol [$_{\text{SUB}}$ ’t-oli-ntu-li-n].
Roger **3-PFV= convince$_{\text{TA}}$-3OBJ-OBV.SG** John-OBV-SG 3-thus-sing$_{\text{AI}}$-OBV-N
‘Roger **convinced** John to sing.’ (GP, RP 2021.11.10)

d. Piyel **’-kisitahatom-on** [$_{\text{SUB}}$ ’t-oliy-a-n sukolopan-ol].
Peter **3-decide$_{\text{TI}}$-N** 3-make$_{\text{TA}}$-3OBJ-N cake-OBV.SG
‘Peter **decided** to make a cake.’ (EM 2022.11.09)

e. Tihtiyas **’-pecitahatom-on** [$_{\text{SUB}}$ Ø-mici-n mahsusi-yil].
Tihtiyas **3-decide$_{\text{TI}}$-N** 3-eat$_{\text{TI}}$-N fiddlehead-IN.PL
‘Tihtiyas **decided** to eat fiddleheads.’ (EM 2022.04.25;NR)

f. Nekom =ona **’t-ol-suwasi-n** [$_{\text{SUB}}$ Ø-naci= kotunka-n].
3SG =ADD **3-thus-plan$_{\text{AI}}$-N** 3-go= hunt$_{\text{AI}}$-N
‘He, too, was **planning** on going hunting.’
https://pmportal.org/dictionary/olsuwasu-lahsuwasu

g. **’T-osah-a-`** =na [$_{\text{SUB}}$ Ø-nomiy-a-n].
3-refuse$_{\text{TA}}$-3OBJ-OBV.PL =ADD 3-see$_{\text{TA}}$-3OBJ-N
‘And he **refuses** to see them.’ https://pmportal.org/dictionary/osahal

h. Alu **nt-iy-a-hpon** [$_{\text{SUB}}$ ’-peci-ya-n], ma tahk kisi= kcosk-essi-w.
though **1-tell$_{\text{TA}}$-3OBJ-PRET** 3-come-go$_{\text{AI}}$-N NEG but can= slip-move$_{\text{AI}}$-NEG
‘Though I **told** her to come, she couldn’t get away.’
https://pmportal.org/dictionary/alu

i. N-ikuwoss **n-kisi= olokim-oq** [$_{\text{SUB}}$ n-qasahkal-a-n opan].
1-mother **1-PFV= order$_{\text{TA}}$-INV** 1-throw$_{\text{TA}}$-3OBJ-N bread
‘My mother **ordered** me to throw the bread away.’ (EM 2021.12.01)

j. ‘-**Pawatom-on** Roger [$_{\text{SUB}}$ nt-olintu-wew-a-n Husa].
3-want$_{\text{TI}}$-N Roger 1-sing$_{\text{AI}}$-APPL-3OBJ-N John
‘Roger **wants** me to sing to John.’ (GP, MA 2022.05.16)

However, there are a few cases where situation complements are not subordinative. Some verbs, like *’tiyal* ‘tell’ and *’toqecimulal* ‘ask’, are able to take conjunct complements with the preverb *’ci* ‘from, for’ (in its changed for *weci*)—perhaps something like a prepositional complementizer akin to English *for*:

(309) Situation complements with *weci* ‘IC.for’

a. **Nt-iy-a-hpon** n-qoss [$_{\text{CJ}}$ weci= naci= koss-apite-n-si-t].
1-tell$_{\text{TA}}$-3OBJ-PRET 1-son IC.for= go= wash-tooth-by.hand$_{\text{TA}}$-REFL-3CJ
‘I **told** my son to go brush his teeth.’ (EM 2022.09.28;NR)

b. Piyel ’-**qecimul-a-l** Sapet-ol [$_{\text{CJ}}$ weci=
Peter **3-ask$_{\text{TA}}$-3OBJ-OBV.SG** Elizabeth-OBV.SG IC.for=
pom-okam-iht].
along-dance.with$_{\text{TA}}$-INV.3SG.CJ
‘Peter **asked** Elizabeth to dance with him.’ (EM 2022.05.23)

And, at least with *’tiyal* ‘tell’ (and potentially other directive verbs), it’s possible to embed imperative complements. It’s easiest to tell that this is true embedding (rather than quotation) with third person imperative forms, like the following examples:

(310) a. **Yah-a-n** [$_{\text{IMP}}$ nat-okehkim-uc]!
tell$_{\text{TA}}$-3OBJ-2SG.IMP go-teach$_{\text{TA}}$-X:3IMP
‘**Tell** him to go to school!’ (lit. ‘Tell him to go be taught!’)
https://pmportal.org/dictionary/natokehkimal

b. **N-kisi= yah-a-n** [$_{\text{IMP}}$ mah-a-c cikoni-yil].
1-PFV= tell$_{\text{TA}}$-3OBJ-N eat$_{\text{TA}}$-3OBJ-3SG.IMP apple-OBV.SG
‘I **told** him to eat an apple.’ (GP, MA 2022.09.21;NR)

c. **N-kisi= yah-a-n** [$_{\text{IMP}}$ oli-ya-c Sipayik].
1-PFV= tell$_{\text{TA}}$-3OBJ-N there-go$_{\text{AI}}$-3SG.IMP Sipayik
‘I **told** her to go to Sipayik.’ (GP 2022.05.23;NR)

On the whole, situation complements are subordinative. The few exceptions are those predicates that can also optionally embed conjunct complements with the preverb *weci* ‘IC.for’, and those that can embed imperatives.

Thus, situation complements generally get “downgraded” a clause size, from the full CP independent and conjunct clauses found with proposition complements, to CP-less subordinative clauses. And, strikingly, the cases where we *do* get conjunct situation complements are those that involve what looks like a prepositional complementizer, *weci* ‘IC.for’, akin to English *for.* If this is the right way of thinking about things, the presence of a complementizer would thus force the complement to be CP-sized, and thus preclude the possibility of subordinative. But I leave more detailed investigation of *weci* complements and imperative complements for future work.

The systematically reduced size of situation complements in Passamaquoddy, visible quite plainly on the surface due to subordinative morphology, provides further support for the Implicational Complementation Hierarchy. A prediction of this approach is that the same predicate should be able to embed different sized clauses with a concomitant change in meaning—something that is true in Passamaquoddy. Certain predicates, like *'toqecimulal* 'ask', *'kisitahatomon* 'decide', and *'tiyal* 'tell' can embed both subordinative and conjunct/independent complements with the corresponding change in meaning between a situation and proposition complement respectively. Under the proposition complement reading, *'toqecimulal* 'ask' means 'ask (a question)', *'kisitahatomon* 'decide' means 'decide (that), come to the conclusion (that)', and *'tiyal* 'tell', which we've already seen above, means 'tell someone (that)', as illustrated below:

(311) *'toqecimulal* 'ask', *'kisitahatomon* 'decide', and *'tiyal* 'tell' with proposition complements

a. **Nt-oqecimul-oq** [$_{\text{IND}}$ keq nt-itom].
1-ask$_{\text{TA}}$-INV what 1-say$_{\text{AI}}$
'He **asked** me what I said.' https://pmportal.org/dictionary/oqecimulal

b. Wen **kisitahato-k** [$_{\text{CJ}}$ wihqim-a-t]?
who **IC.decide$_{\text{TI}}$-3CJ** IC.invite$_{\text{TA}}$-3OBJ-3CJ
'Who did she **conclude** that she invited?' (GP, MA 2022.09.07;NR)

c. **Nt-iy-uku-k** wolaku [$_{\text{CJ}}$ eli kophom-Ø yut nil].
1-tell$_{\text{TA}}$-INV-PROX.PL yesterday IC.that close$_{\text{TI}}$-1SG.CJ this 1SG
'They **told** me yesterday that I closed it [the window].' (RP 2020.11.17)

All of these behaviors fall out naturally from the Implicational Complementation Hierarchy.

6.1.4 Event complements

Turning to the last of Wurmbrand and Lohninger's categories, let's examine event complements. Below, I exemplify the following nonexhaustive list of event complement predicates: *'taluwehtun* 'fail, try unsuccessfully', *unitahasin* 'forget (implicative)', *wewitahatomon* 'remember (implicative)', *mihqitahasin* 'remember (implicative)', *'kisehtun* 'make', *cuwitpot* 'should', *kamot* 'it would be better', *'conehtun* 'stop', and *'toqecehtun* 'try'.

(312) a. **'T-aluweht-uw-a-n** [$_{\text{SUB}}$ 't-apaci= nehsa-li-n].
3-fail$_{\text{TI}}$-APPL-3OBJ-N 3-back= breathe$_{\text{AI}}$-OBV-N
'He tried to resuscitate her, but to no avail.'
https://pmportal.org/dictionary/aluwehtuwan

b. Piyel **'-kisi= wonitahasi-n** [$_{\text{SUB}}$ 't-oli-y-a-n sukolopan-ol].
Peter **3-PFV= forget$_{\text{AI+O}}$-N** 3-thus-make$_{\text{TA}}$-3OBJ-N cake-OBV.SG
'Peter **forgot** to make a cake.' (EM 2022.11.09)

c. **Ø-Wewitahatom-on** Tihtiyas [$_{\text{SUB}}$ Ø-mattoktehmuw-a-n Ø-muhsums-ol].
3-remember$_{\text{TI}}$-N Tihtiyas 3-call$_{\text{TA}}$-3OBJ-N 3-grandfather-OBV.SG
'Tihtiyas **remembered** to call her grandfather.' (EM 2023.01.04;NR)

d. Tehpu =ona **mihqitahasi-t** [$_{\text{SUB}}$ '-kossehl-a-n].
only =ADD **remember$_{\text{AI+O}}$-3CJ** 3-let.in$_{\text{TA}}$-3OBJ-N
'I hope he **remembers** to let him in.' (lit. 'If only he remembers to let him in!')
https://pmportal.org/dictionary/kossehlal

e. Motewolon **'-kiseht-uw-a-n** [$_{\text{SUB}}$ 't-apsokilu-li-n mahtoqehsu-wol].
motewolon **3-make$_{\text{TI}}$-APPL-3OBJ-N** 3-be.small$_{\text{AI}}$-OBV-N rabbit-OBV.SG
'The motewolon[4] **made** the rabbit small.' https://pmportal.org/dictionary/apsokil

f. **Kamot**=te [$_{\text{SUB}}$ k-poskuw-a-n ahtulhaw].
better=EMPH 2-wear$_{\text{TA}}$-3OBJ-N shirt
'You'd **better** wear a shirt.' https://pmportal.org/dictionary/cossu-2

g. **Cuwitpot-Ø** [$_{\text{SUB}}$ kt-otoli= kossicuwenika-ne-n peciya-t k-ikuwoss-on].
should.be$_{\text{II}}$-3 2-PROG= do.dishes$_{\text{AI}}$-N-1PL IC.arrive-3CJ 2-mother-1PL
'We **should** be doing the dishes when mom gets back.' (EM 2022.12.21)

h. **Cenehtu-Ø** [$_{\text{SUB}}$ n-kos-apuwa-n kahpe], on n-mace= macihpusi-n.
IC.stop$_{\text{TI}}$-1SG.CJ 1-hot-drink$_{\text{AI}}$-N coffee then 1-start= shake$_{\text{AI}}$-N
'When I **stopped** drinking coffee, I started to get the shakes.'
https://pmportal.org/dictionary/conehtun

i. **Nt-oqecehtu-n** [$_{\text{SUB}}$ skat nt-otol-oqsi-w-on].
1-try$_{\text{TI}}$-N NEG 1-PROG-sleep$_{\text{AI}}$-NEG-N
'I **tried** to not fall asleep.' (GP, MA 2023.05.16)

As can be seen, all of these predicates (mostly all verbs, except for *kamot* 'it would be better', which is an non-inflecting particle) embed subordinative clauses.

In Wurmbrand and Lohninger's model, we can understand this behavior as follows. Semantically, these predicates take a predicate of events as a complement—the kind of semantic object denoted by a VP. The fact that these complements are TP-sized (being subordinative), then, indicates that the TP layer in these embedded clauses is not semantically contentful.

Is it possible for event complement predicates to directly embed VPs? The answer is probably yes. The majority of event complement predicates are actually more commonly found as preverbs/initials, appearing directly as a part of the verbal complex, rather than as their own independent verb. For instance, corresponding to several of the verbs seen above, we have *aluw(i)-* 'fail', *(ah)cuw(i)-* 'should, must', *con(i)-* 'stop', and *(o)qeci-* 'try':

[4] A motewolon is a kind of sorceror, shaman, or person with magical powers in Passamaquoddy folklore. For more information on motewolonuwok, see the stories collected in Teeter and LeSourd (2007) and Newell and Leavitt (2020), as well as the secondary literature, including Wallis and Wallis (1957), Smith (1977), Erickson (1978), Smith and Walker (1997), LeSourd (2000, 2021), and Wherry (2007).

(313) a. ’T-**aluwi**= [$_{VP}$ nutehtu-n ’-pihtin].
3-**fail**= take.out$_{TI}$-N 3-hand
‘He **tried** to pull his hand out, but **without success**.’
https://pmportal.org/dictionary/nutehtun

b. Nt-**ahcuwi**=te [$_{VP}$ soniq].
1-**must**=EMPH blow.nose$_{AI}$
‘I **have to** blow my nose.’ (GP, RP 2020.06.24)

c. Ma=te **coni**= [$_{VP}$ assokitahasi-w-Ø].
NEG=EMPH **stop**= be.surprised$_{AI}$-NEG-3
‘He never **stops** being surprised.’ https://pmportal.org/dictionary/assokitahasu

d. ’T-**oqeci**= [$_{VP}$ katu-n etoli= kisi= pokehl-ut].
3-**try**= hide$_{TI}$-N IC.there= PFV= bite$_{TA}$-X:3CJ
‘He **tried** to hide the place where he’d been bitten.’
https://pmportal.org/dictionary/katun

If these truly involve VP embedding, then it seems that there are two kinds of event complements in Passamaquoddy: those that are VP sized (which are embedded under preverbs/initials), and those that are TP-sized (subordinative clauses embedded under verbal predicates and particles like *kamot* ‘it would be better’). This is exactly the kind of within-language variation predicted by Wurmbrand and Lohninger’s account: event complements can be VPs or bigger.

Strikingly, I am not aware of any situation complement predicates that have similar preverb/initial variants that embed VPs, in contrast to these event complement predicates. Again, this follows naturally from the Implicational Complementation Hierarchy—since situation complements must be TP-sized, they cannot embed something as small as a VP, and must embed a larger, subordinative clause.

Going further, there may even be a few event complements that can embed conjunct—for instance, *nokosanaqsu* ‘take a short time, do quickly’ and *wicuhkemal* ‘help’, both of which I suspect are control predicates (though, of course, this bears further investigation—they could be raising or LDA predicates, or even involve prolepsis):[5]

[5]Both these predicates can also embed subordinative, though there are some complications. For instance, *nokosanaqot*, the II non-control (or non-raising/LDA) counterpart of AI *nokosanaqsu*, embeds subordinative:

(i) **Nokosanaqot-Ø** [$_{SUB}$ Norvin n-kisi= li-ph-uku-ne-n malsanikuwam-ok].
be.quick$_{II}$-3 Norvin 1-PFV= to.there-take$_{TA}$-INV-N-1PL store-LOC
‘It **took a short time** for Norvin to take us to the store.’ (EM 2023.03.14)

And, interestingly, it’s not possible to mix things around—*nokosanaqsu* cannot embed subordinative, and *nokosanaqot* cannot embed conjunct:

(ii) a. ***Nokosanaqsu-Ø** Norvin [$_{SUB}$ n-kisi= li-ph-uku-ne-n malsanikuwam-ok].
be.quick$_{AI}$-3 Norvin 1-PFV= to.there-take$_{TA}$-INV-N-1PL store-LOC
Intended: ‘Norvin **took a short time** to get us to the store.’ (EM 2023.03.14)

b. ***Nokosanaqot-Ø** [$_{CJ}$ Norvin kisi= li-ph-i-nomok malsanikuwam-ok].
be.quick$_{II}$-3 Norvin IC.PFV= to.there-take$_{AI}$-1OBJ-3:1PL.CJ store-LOC
Intended: ‘It **took a short time** for Norvin to take us to the store.’ (EM 2023.03.14)

It remains to be seen what the ultimate explanation for this alternation is.

(314) a. **Nokosanaqsu-Ø** Norvin [$_{CJ}$ kisi= li-ph-i-nomok
be.quick$_{AI}$-3 Norvin IC.PFV= to.there-take$_{AI}$-1OBJ-3:1PL.CJ

malsanikuwam-ok].
store-LOC

'Norvin **took a short time** to get us to the store.' (EM 2023.03.14)

b. Mec=op=al '**-kisi= wicuhkem-i** [$_{CJ}$ kess-icuwe-n-iki-Ø]?
still=CF=NDIR **2-can= help$_{TA}$-1PL** IC.wash-dish-by.hand$_{TA}$-ANTIP-1SG.CJ

'Could you please **help** me do the dishes?' (GP, MA 2022.05.16;GR)

Additionally, direct perception reports, which involve perceiving an actual event in the world (rather than indirect perception reports, which describe perceiving evidence for a proposition), are all conjunct in Passamaquoddy:

(315) a. Context: During elicitation, you were distracted by Tiger playing with a bag.

Ø-Nomiy-a [$_{CJ}$ Tiger etol-ahyekta-q ptoqap].
3-see$_{TA}$-3OBJ Tiger IC.PROG-play.with$_{TI}$-3CJ bag

'I **saw** Tiger playing with the bag.' (GP 2023.01.30)

b. Context: While at home last night, I heard the sound of a big storm outside.

Ø-Nutomo-n [$_{CJ}$ etut-amoqessi-k welaqik].
1-hear$_{TI}$-N IC.much-storm$_{II}$-CJ last.night

'I **heard** it storming a lot last night.' (GP 2023.01.30)

All of these facts are straightforwardly predicted by the Implicational Complementation Hierarchy, as there is nothing preventing event complements from being structurally large, as long as the higher structure doesn't have a semantic impact in changing the type/sort of the complement.

Again, just like with situation complement predicates, there are event complement predicates that vary in their meaning depending on what kind of clause type they embed. For instance, *unitahasin* 'forget', *wewitahatomon* 'remember', and *mihqitahasin* 'recall' can each take both conjunct and subordinative complements, with the corresponding difference in proposition complement versus event complement interpretations. Illustrating with *unitahasin* 'forget', we can find variation between a factive proposition complement reading and an implicative event complement reading:

For *wicuhkemal* 'help', there are two other embedding possibilities: subordinative, or conjunct plus *weci* 'IC.for' (the latter seems to be the most common option):

(iii) a. **Wicuhkem-a-n** n-pomawsuwinu-m-ok [$_{SUB}$ '-sakol-omt-ulti-ni-ya].
help$_{TA}$-3OBJ-2SG.IMP 1-person-POSS-PROX.PL 3-sturdy-have.quality$_{AI}$-PL-N-PL

'**Help** my people get healthy.' https://pmportal.org/dictionary/sakolomtu

b. Roger **'-kisi= wicuhkem-a-l** n-itapi-yil [$_{CJ}$ **weci=** kisihta-q sunap].
Roger **3-PFV= help$_{TA}$-3OBJ-OBV.SG** 1-friend-OBV.SG **IC.for=** make$_{TI}$-3CJ jam

'Roger **helped** my friend make jam.' (EM 2022.08.01)

For the latter case with *weci*, it's actually not clear on the surface whether this is true embedding or whether the *weci* clause is a purpose clause.

(316) a. Mehq-ihtuwa-t **Ø-unitahasi-n** [$_{\text{CJ}}$ eli <u>apenkato-k</u> utapakon].
IC.red-have.beard$_{\text{AI}}$-3CJ **3-forget$_{\text{AI}}$-N** IC.that <u>pay.for$_{\text{TI}}$-3CJ</u> car
'Norvin **forgot that** he paid for the car.'
#'…forgot to pay…' (RP 2020.06.17;EN)

b. Mehq-ihtuwa-t **Ø-unitahasi-n** [$_{\text{SUB}}$ <u>'t-apenkatom-on</u> utapakon].
IC.red-have.beard$_{\text{AI}}$-3CJ **3-forget$_{\text{AI}}$-N** <u>3-pay.for$_{\text{TI}}$-N</u> car
'Norvin **forgot to** pay for the car.'
#'…forgot that he paid…' (RP 2020.06.17;EN)

With the conjunct complement (316a), we get a factive reading—this sentence can only be uttered if Norvin did actually pay for the car. In contrast, with the subordinative complement (316b), we get an implicative reading—this sentence entails that Norvin *didn't* actually pay for the car. This is exactly the kind of alternation predicted by the Implicational Complement Hierarchy.

6.1.5 Conclusions, remaining questions, and future prospects

With that, we've gone through each of Wurmbrand and Lohninger's (2023) complement types—proposition, situation and event—and examined what form they take in Passamaquoddy. Under the Implicational Complementation Hierarchy, proposition complements must minimally be CP-sized, situation complements must minimally be TP-sized (but can be larger), and event complements must minimally be VP-sized (but can be larger). This is exactly the empirical picture found in Passamaquoddy:

- Proposition complements are all independent or conjunct—the two CP-sized clause types.
- Situation complements are generally subordinative, the TP-sized clause type, but a few are conjunct (CP-sized).
- Event complements can be VP-sized (if the event complement predicate takes the form of a preverb rather than an independent clause-embedding verb), subordinative (TP-sized), or even in a few cases conjunct (CP-sized).

I summarize this staircase cline of embedding possibilities in Table 6.1—though note that CP-sized situation and event complements are much less common than TP- and VP-sized complements, and are found only with a limited set of predicates.

	CP	TP	VP
Proposition	✓	*	*
Situation	✓	✓	*
Event	✓	✓	✓

Table 6.1: Embedding possibilities in Passamaquoddy

There are several remaining questions and issues, both empirical and theoretical. One such set of questions concerns clause-embedding predicates that I have not presented yet—most notably, emotive predicates like *assokitahasu* 'be surprised' and *palitahasu* 'be proud, happy', the verb *olomolsu* 'feel (like)', and the verb *nokatomon* 'fear', which I do not know how to categorize in Wurmbrand and Lohninger's (2023) typology. Emotive predicates all consistently embed conjunct (317), and *olomolsu* 'feel (like)' seems to embed independent (318):

(317) Conjunct under emotive predicates

a. **Assokitahasu-Ø** Piyel [$_{CJ}$ eli kci= wewis-oski-li-t psuwis-ol].
be.surprised$_{AI}$-3 Peter IC.C great= nosy-behave$_{AI}$-OBV-3CJ cat-OBV.SG
'Peter **is surprised** that the cat is so nosy.' (GP 2023.01.24)

b. Taniya **palitahasu-Ø** [$_{CJ}$ olomuss etol-ahyekta-q skonis-ol].
Tanya **be.proud$_{AI}$-3** dog IC.PROG-play.with$_{TI}$-3CJ bone-IN.PL
'Tanya **is happy** the dog is playing with the bones.' (GP, MA 2022.12.14)

(318) Independent under *olomolsu* 'feel (like)'

a. Nt-ehpite-m **ol-omolsu-Ø** [$_{IND}$ n-usam-ewest].
1-woman-POSS **thus-feel$_{AI}$-3** 1-too.much-talk$_{AI}$
'My wife **feels like** I talk too much.' (GP 2023.03.21;NR)

b. N-ikuwoss **ol-omolsu-Ø** [$_{IND}$ wehqa= kpahasu-Ø]...
1-mother **thus-feel$_{AI}$-3** enclosed= be.locked.up$_{AI}$-3
'My mother **feels** she is completely closed in...'
https://pmportal.org/dictionary/wehqa-kpahasu

The verb *nokatomon* 'fear' can embed subordinative, conjunct, and apparently also occasionally independent (though I've seen independent only a handful of times—conjunct and subordinative are by far the most common options under *nokatomon* 'fear'):

(319) Subordinative, conjunct, and independent under *nokatomon* 'fear'

a. **Ø-Nokatom-on** [$_{SUB}$ k-wisoki-luwaha-n].
1-fear$_{TI}$-N 2-very-be.angry$_{AI}$-N
'I'm **afraid** you'll be angry.' https://pmportal.org/dictionary/nokatomon

b. **Ø-Nokatom-on** Roger [$_{CJ}$ keti= psa-k].
3-fear$_{TI}$-N Roger IC.going.to= rain$_{II}$-CJ
'Roger **is afraid** it's going to rain.' (EM 2022.12.21)

c. **Ø-Nokatom-on** [$_{IND}$ cu Ø-wihqim-a-l Sapet-ol].
1-fear$_{TI}$-N surely 3-invite$_{TA}$-3OBJ-OBV.SG Elizabeth-OBV.SG
'I'm **afraid** he'll invite Elizabeth.' (MA 2023.02.21;NR)

I do not know what the syntactic and semantic differences are between these different embedding options under *nokatomon* 'fear'.

Another interesting topic to explore is perception reports. Perception verbs embed conjunct, whether they express indirect perception (proposition complement, describing perceive evidence for a proposition) or direct perception (situation or event complement, describing direct perception of a situation/event in the world):

(320) a. Context (indirect): The news is saying that there's going to be a storm later today.

Ø-Nutom-one-n [$_{CJ}$ eli kotuw-amoqessi-k].
1-hear$_{TI}$-N-1PL IC.C going.to-storm$_{II}$-CJ
'We **heard** that there's going to be a storm.' (GP, MA 2023.02.01)

b. Context (direct): While at home last night, I heard the sound of a big storm outside.

Ø-Nutomo-n [$_{CJ}$ etut-amoqessi-k welaqik].
1-hear$_{TI}$-N IC.much-storm$_{II}$-CJ last.night
'I **heard** it storming a lot last night.' (GP 2023.01.30)

We can note that the indirect perception report features an *eli* in the complement, whereas the direct perception report lacks *eli*. Interestingly, this is true of all of the perception reports I've seen: all indirect perception complements contain *eli*, whereas all direct perception complements lack it. Closer investigation of perception reports might teach us something about the contribution of *eli*, which I've so far had nothing to say about. Another suggestive difference between the two is that it seems that indirect perception complements can also be independent:

(321) a. Kenoq =olu Muwin **Ø-nomihtu-n** [$_{IND}$ nit Ø-nokomasi= kisi= nekom
but =CTOP Bear **3-see$_{TI}$-N** that.IN.SG 3-easy= can= 3SG
kin-alok-ehtu-n].
big-hole-make$_{TI}$-N
'But Bear **sees** that he can easily make the hole bigger.' (lit. 'But Bear sees that he easily can make a big hole in it.') https://pmportal.org/dictionary/kinalokehtun

b. **Ø-Nomihtu-n** [$_{IND}$ ma '-kis-onuw-a-wi-yil molaqs-ol].
3-see$_{TI}$-N NEG 3-PFV-buy$_{TA}$-3OBJ-NEG-OBV.SG milk-OBV.SG
'She **sees** that she didn't buy milk.' (CF 2023.01.29;FB)

The properties of Passamaquoddy perception reports deserve closer study. In particular, is there a deeper reason why even direct perception complements are conjunct, and not subordinative? The possibility of unexpectedly large direct perception complements seems relatively crosslinguistically common—for instance, pseudorelatives in Romance and other languages (Kayne 1975, Radford 1977, Guasti 1988, 1993, Cinque 1996, Côté 1999, Rafel 2000, Angelopoulos 2015, Moulton and Grillo 2015, a.m.o.). Could there be some connection here? Daniel Harbour (p.c.) suggests a potential link between direct perception reports and (direct) evidentials, a parallel that might allow us to connect the syntax of perception reports to work on the syntax of evidentials (Cinque 1999, Speas 2004, 2008, Blain and Déchaine 2006, 2007, Simeonova and Zareikar 2015, Korotkova 2016, 2021, Bhadra 2018, a.o.), which could give us insight into why exactly perception complements are the size they are, and how perception reports are built up compositionally.

Stepping back a bit from Passamaquoddy, we should consider what broader theoretical work remains to be done. In a sense, Wurmbrand and Lohninger (2023) and this present work are promissory notes—while we show that the semantics of the embedding verb correlates with the size of the complement it embeds, and suggest that the size of the complement correlates with its semantic type (following Ramchand and Svenonius 2014), we don't provide the full story. In particular, we're missing the compositional semantic analysis, and answers to deeper questions like the following: why is it that predicates like *litahasu* 'believe' and *'kocicihtun* 'know' *have* to embed propositions? What is it about their meaning that forces this—or maybe they actually can embed something smaller (for instance, Bryant and Bhadra 2021 argue that Oromo (Cushitic) epistemic attitudes take situaton complements)? Conversely, why is it that predicates like *'toqecehtun* 'fail' and *'conehtun* 'stop' *have* to embed events? Why can't they embed situations or propositions? A complete answer to the question of the theory and typology of complement types must address these issues fully—a daunting task.

However, there are a number of promising paths forward towards tackling this larger theoretical question. In particular, I've shown here that there are a number of predicates that are able to take different complement types, often with a change in meaning: like *'tiyal* 'tell', *'toqecimulal* 'ask', *wewitahatomon* 'remember', and *unitahasin* 'forget', which can embed independent, conjunct, and subordinative, with corresponding changes in meaning; *nokatomon* 'fear' which can also embed all clause types, but whose semantics is as of yet unclear and deserves further investingation; and perception verbs, where direct and indirect perception correlates with the presence and absence of the complementizer *eli*.

I'll end this section with another such alternation that could be promising to explore, which takes a particularly interesting form in Passamaquoddy, a kind we have not yet seen: the difference between 'want' and 'hope'. There are a number of interesting syntactic and semantic differences between the seemingly similar 'want' and 'hope', as explored by Portner (1992), Scheffler (2008), Anand and Hacquard (2013), and Portner and Rubinstein (2020), among others—an overarching conclusion is that complements of 'hope' tend to be less reduced, and 'hope' has a kind of connection to belief that 'want' lacks (Anand and Hacquard 2013 label it an "emotive doxastic"). In Passamaquoddy, we've already seen that *'pawatomon* 'want' embeds subordinative situation complements—but what about 'hope'? When asked to translate English 'hope', speakers use the particle *nopal* 'if only, I wish' for first person hopes (which embeds unchanged conjunct), and typically embed *nopal* 'if only, I wish' under *litahasu* 'think' to express non-first-person hopes—see also Bogal-Albritten (2016) on a similar phenomenon in Navajo (Athabaskan) and Močnik and Abramovitz (2019) on Koryak (Chukotko-Kamchatkan):

(322) a. Context: Norvin has made plans for a group dinner with us and some elders. The restaurant is usually very busy, so Norvin should have made a reservation, but maybe he didn't.

Nopal	[$_{\text{CJ}}$	Mehq-ihtuwa-t	<u>kisi=</u>	<u>nihkani=</u>	<u>mattoktehmuw-a-t</u>
if.only		IC.red-have.beard$_{\text{AI}}$-3CJ	<u>PFV=</u>	<u>ahead=</u>	<u>call$_{\text{TA}}$-3OBJ-3CJ</u>

ihtoli-hp-ulti-mo-k	].
IC.HAB.there-eat$_{\text{AI}}$-PL-X-CJ	

'I **hope** Norvin made a reservation.' (lit. '…called the restaurant in advance.')
(EM 2023.02.28)

b.

Cora	**totoli=**	**litahasu-Ø**	[	**nopal**	[$_{\text{CJ}}$	<u>pun-a-hti-t</u>	pskihqimins-`
Cora	**PROG=**	**think$_{\text{AI}}$-3**		**if.only**		<u>put$_{\text{TA}}$-3OBJ-3PL-3CJ</u>	strawberry-OBV.PL

(lamiw)	sukolopan-ok	]].
(into)	cake-LOC	

'Cora **is hoping** they put strawberries in the cake.' (lit. '…is thinking if only…')
(GP, MA 2023.02.01;NR)

Additionally, at least provisionally, it seems that embeddded *nopal* 'if only, I wish' isn't always a quotation (at least for some speakers), as it seems to be possible to extract out of its complement:

(323) *Keq* **toli=** **litahasu-Ø** Cora [**nopal** [$_{CJ}$ punomu-hti-t *t* lamiw sukolopan-ok]]?
what PROG= **think$_{AI}$-3** Cora **if.only** put$_{TI}$-3PL-3CJ into cake-LOC
'*What* is Cora **hoping** they put in the cake?' (GP, MA 2023.02.01)

What is it about the meaning of 'hope' that leads speakers to translate it in this way, and what does this tell us about the syntax and semantics of clausal embedding?

There is a lot of work still to be done, but at the same time there are a lot of promising paths forward. My main goal has been to show that Wurmbrand and Lohninger's (2023) approach to these issues is on the right track and that it accurately captures the distribution of complementation strategies in Passamaquoddy. And, in this last section, I hope to have highlighted a number of interesting remaining empirical and theoretical questions, both Passamaquoddy-specific as well as crosslinguistic, that should serve to take this particular research program further.

6.2 Coordination

Now we turn to the use of the subordinative in coordination. To start off with, we can note that there are generally two ways of expressing coordination in Passamaquoddy, which I will term MATCHING COORDINATION and SUBORDINATIVE COORDINATION. In matching coordination, both conjuncts are the same clause type, and in subordinative coordination, the second conjunct is subordinative, no matter what the first conjunct is. To illustrate, let's take a look at the following:

(324) **Kisi=** **pkon-a** piley sakom wolaku, naka... *Independent*
PFV= **pick$_{TA}$-3OBJ** new chief yesterday and
'A new chief was elected yesterday, and...'

a. ...[$_{IND}$ **n-kisi=** **wiqhopalt-ulti-pon**]. *Matching coordination*
1-PFV= **celebrate$_{AI}$-PL-1PL**

b. ...[$_{SUB}$ **n-kisi=** **wiqhopalt-ulti-ne-n**]. *Subordinative coordination*
1-PFV= **celebrate$_{AI}$-PL-N-1PL**

Both: '...we celebrated.' (GP, MA 2023.04.25)

The first conjunct here is independent, being a plain matrix declarative. There are two ways to add a second conjunct: in (324a), the second conjunct is independent, whereas in (324b), the second conjunct is subordinative. Both options work—but when should we use each one?

Before we proceed any further, it's worth reassuring ourselves that these structures really are coordination structures. This is because one could imagine a structure for subordinative coordination, say, where the subordinative "conjunct" is actually some kind of adjunct. We could thus imagine two hypotheses: *(i)* subordinative coordination is a kind of coordination like any other, and *(ii)* subordinative coordination is a kind of adjunct structure, with a matrix clause and an adjunct subordinative clause.

To tell apart these two hypotheses, we can make use of the differing island behavior of coordination and adjunction. With coordination, we cannot extract out of either conjunct, as we can see from the following examples:

(325) Matching coordination: both conjuncts are islands

a. [$_{IND}$ Piyel totoli= posonute-hke-Ø] naka [$_{IND}$ Norvin 't-otoli= mattoktehmuw-a-l w-itapi-yil].
Peter PROG= basket-make$_{AI}$-3 and Norvin 3-PROG= call$_{TA}$-3OBJ-OBV.SG 3-friend-OBV.SG
'Peter was making a basket and Norvin was calling a friend.' (EM 2023.07.11)

b. * **Keq** [$_{CJ}$ etoli-htu-won-s ⟨keq⟩] naka [$_{IND}$ Norvin 't-otoli= mattoktehmuw-a-t w-itapi-yil]?
what IC.PROG-make$_{TI}$-2SG.CJ-DUB and Norvin 3-PROG= call$_{TA}$-3OBJ-3CJ 3-friend-OBV.SG
*'**What** [were you making ⟨what⟩] and [Norvin was calling a friend]?' (EM 2023.07.11)

c. * **Weni-l** [$_{IND}$ kt-otoli= posonute-hk] naka [$_{CJ}$ Norvin etoli= mattoktehmuw-a-t ⟨wenil⟩]?
who-OBV.SG 2-PROG= basket-make$_{AI}$ and Norvin IC.PROG= call$_{TA}$-3OBJ-3CJ
*'Who [were you making a basket] and [Norvin was calling ⟨who⟩]?' (EM 2023.07.11)

d. * **Weni-l** [$_{CJ}$ etoli= posonute-hki-yin] naka [$_{CJ}$ Norvin etoli= mattoktehmuw-a-t ⟨wenil⟩]?
who-OBV.SG IC.PROG= basket-make$_{AI}$-2SG.CJ and Norvin IC.PROG= call$_{TA}$-3OBJ-3CJ
*'Who [were you making a basket] and [Norvin was calling ⟨who⟩]?' (EM 2023.07.11)

In (325a), we have a baseline matching coordination of two independent clauses. In (325b), we've tried to extract out of just the first conjunct (turning it conjunct due to the *wh* movement), which is impossible. In (325c–d), we've tried to extract out of just the second conjunct (turning it conjunct due to the *wh* movement), both with an independent and a conjunct first conjunct, and the result is not good either.[6] Thus, we have a classic CSC effect: you cannot extract from out of either conjunct of a coordination.

In contrast, with an adjunct structure, you get island effects with the adjunct, but it's totally fine to move from the matrix clause:

[6]Making the second conjunct independent doesn't help things either:

(i) * **Weni-l** [$_{IND/CJ}$ kt-otoli= posonute-hk / etoli= posonute-hki-yin] naka [$_{IND}$ Norvin 't-otoli= mattoktehmuw-a-l ⟨wenil⟩]?
who-OBV.SG 2-PROG= basket-make$_{AI}$ IC.PROG= basket-make$_{AI}$-2SG.CJ and Norvin 3-PROG= call$_{TA}$-3OBJ-OBV.SG
*'Who [were you making a basket] and [Norvin was calling ⟨who⟩]?' (EM 2023.07.11)

(326) Adjuncts: only the adjunct is an island

a. [$_{\text{CJ}}$ **Keq** etoli-htu-won-s ⟨keq⟩ [$_{\text{CJ}}$ qeni= Norvin mattoktehmuw-a-t
what IC.PROG-make$_{\text{TI}}$-2SG.CJ-DUB IC.while= Norvin call$_{\text{TA}}$-3OBJ-3CJ
w-itapi-yil]]?
3-friend-OBV.SG
'[**What** were you making ⟨what⟩ [while Norvin was calling a friend]]?' (EM 2023.07.11)

b. *[$_{\text{IND}}$ **Weni-l** kt-otoli= posonute-hk [$_{\text{CJ}}$ qeni= Norvin
who-OBV.SG 2-PROG= basket-make$_{\text{AI}}$ IC.while= Norvin
mattoktehmuw-a-t ⟨wenil⟩]]?
call$_{\text{TA}}$-3OBJ-3CJ
*'[**Who** were you making a basket [while Norvin was calling ⟨who⟩]]?' (EM 2023.07.11)

c. *[$_{\text{CJ}}$ **Weni-l** etoli= posonute-hki-yin [$_{\text{CJ}}$ qeni= Norvin
who-OBV.SG IC.PROG= basket-make$_{\text{AI}}$-2SG.CJ IC.while= Norvin
mattoktehmuw-a-t ⟨wenil⟩]]?
call$_{\text{TA}}$-3OBJ-3CJ
*'[**Who** were you making a basket [while Norvin was calling ⟨who⟩]]?' (EM 2023.07.11)

In (326a) we see that it's fine to have a *wh* question over something in the matrix clause—compare this especially to (325b)—but in (326b–c) we see that trying to extract out of the adjunct clause gives an adjunct island violation, no matter whether the matrix clause is independent or conjunct.

Thus, this difference in island patterns we get between coordination and adjunct structures should allow us to differentiate between the two hypotheses about subordinative coordination. When we apply this diagnostic to subordinative coordination, we find it patterns like a genuine coordination in showing CSC effects:

(327) Subordinative coordination: both conjuncts are islands

a. [$_{\text{IND}}$ Nt-ap-onuw-a molaqs] on [$_{\text{SUB}}$ n-kisi-y-a-n
1-come.from-buy$_{\text{TA}}$-3OBJ milk and 1-PFV-make$_{\text{TA}}$-3OBJ-N
sukolopan] wolaku.
cake yesterday
'I [bought milk] and [made a cake] yesterday.' (EM 2022.12.07)

b. ***Keq** [$_{\text{CJ}}$ kis-onuhm-on ⟨keq⟩] on [$_{\text{SUB}}$ k-sukolopan-ka-n] wolaku?
what IC.PFV-buy$_{\text{TI}}$-2SG.CJ and 2-cake-make$_{\text{AI}}$-N yesterday
*'**What** did [you buy ⟨what⟩] and [make a cake] yesterday?' (EM 2022.12.07)

c. ***Keq** [$_{\text{IND}}$ '-kis-onuw-a molaqs] on [$_{\text{SUB}}$ '-kisihtu-n ⟨keq⟩] wolaku?
what 2-PFV-buy$_{\text{TA}}$-3OBJ milk and 2-make$_{\text{TI}}$-N yesterday
Intended: '**What** did you [buy milk] and [make ⟨what⟩] yesterday?' (EM 2022.12.07)

d. ***Keq** [$_{CJ}$ kis-onuw-ot molaqs] on [$_{SUB}$ '-kisihtu-n ⟨keq⟩] wolaku?
what IC.PFV-buy$_{TA}$-2S:3CJ milk and 2-make$_{TI}$-N yesterday
Intended: '**What** did you [buy milk] and [make ⟨what⟩] yesterday?' (EM 2022.12.07)

In (327a) we have the baseline declarative sentence. In (327b), I show that it's impossble to *wh* move out of just the first conjunct of a subordinative coordination—this is the key piece of evidence that subordinative coordination isn't an adjunct structure. If the subordinative clause was an adjunct, then (327b) would just be *wh* movement within the matrix clause and should be acceptable, counter to fact. Additionally, in (327c–d), I show that it's also not possible to *wh* move out of the second conjunct of subordinative coordination, no matter whether the first conjunct is independent (327c) or conjunct (327d), as would be selected by this kind of *keq* 'what' question.[7]

Note, additionally, that subordinative coordination is also subject to the ATB exception: it's possible to move out of a subordinative coordination just as long as you move the same thing out of both conjuncts:

(328) a. **Wen** [$_{CJ}$ ⟨wen⟩ kis-onuw-a-t molaqs-ol] naka [$_{SUB}$ ⟨wen⟩
who IC.PFV-buy$_{TA}$-3OBJ-3CJ milk-OBV.SG and
'-kisi-sukolopan-ka-n] wolaku?
3-PFV-cake-make$_{AI}$-N yesterday
'**Who** [⟨who⟩ bought milk] and [⟨who⟩ made a cake] yesterday?' (EM 2022.12.07)

b. **Keq** [$_{CJ}$ <u>kis-onuhm-on</u> ⟨keq⟩] naka [$_{SUB}$ <u>kt-ol-aqosom-on</u> ⟨keq⟩]
what IC.PFV-buy$_{TI}$-2SG.CJ and 2-thus-cook$_{TI}$-N
wolaku?
yesterday
'**What** did you [buy ⟨what⟩] and [cook ⟨what⟩] yesterday?' (EM 2022.12.07)

This is yet another way in which subordinative coordination really does behave like coordination. Of course, this ATB data can't be an argument against the adjunct hypothesis, due to the possibility of parasitic gaps. However, it does serve as an argument against a hypothesis where subordinative coordination simply blocks *any* movement of any sort.

Given that it obeys the CSC, subordinative coordination really is coordination, and not a kind of adjunct structure. With this issue now settled, we can turn to the main meat of this chap-

[7] Interestingly, the unacceptability of (327c–d) contrasts with the acceptability of the corresponding English sentences. As is by now well known, in these kinds of narrative sequencing uses of conjunction it's possible to extract out of noninitial conjuncts in English, apparently obviating the CSC (Ross 1967, Lakoff 1986, Postal 1998, Altshuler and Truswell 2022 a.m.o.)—these are Lakoff's (1986) "Type A" exceptions to the CSC. Though we can find similar exceptions in other languages, like Tsakhur (Northeast Caucasian; Kazenin and Testelets 2004) as well as Japanese (Japonic) and Korean (Koreanic; Kubota and Lee 2015), there are languages that seem to lack (at least some) of these exceptions, like French (Romance; Postal 1998). Passamaquoddy thus appears to be a French-type language, rather than an English-type language with respect to this property. One potential source of this difference, at least for Passamaquoddy, might lie in the fact that subordinative coordinations might actually be a bit too *big* for Type A effects—as Altshuler and Truswell (2022) note, these kinds of exceptions seem limited to VP coordination, and don't seem to be found in TP or CP coordination. This is a topic that deserves a more in-depth examination than what I am able to provide here.

ter: what is the difference between matching coordination (both conjuncts are the same clause type) and subordinative coordination (second conjunct is subordinative), and why is it subordinative that's used in subordinative coordination (e.g. why isn't there something like "conjunct coordination")? Applying what we've learned from Chapter 5, we might hypothesize that coordination of two independent (or two conjunct) clauses should be CP coordination, as independent and conjunct clauses are CPs, whereas subordinative coordination should be TP coordination, as subordinative clauses are TPs. In this section, I'll argue that this hypothesis is actually on the right track, and that it will allow us to understand the semantics of matching and subordinative coordination, given Bjorkman's (2012, 2013) analysis of asymmetric coordination as TP coordination. In particular, I will show that matching coordination is used in contexts where the second conjunct doesn't temporally and/or causally follow from the first (a symmetric context), whereas subordinative coordination is used in contexts where the second conjunct *does* temporally and/or causally follow from the first (an asymmetric context), as also noted briefly by Ng (2002: 30). I end by presenting a number of loose threads—most prominently, seeming CSC violations in subordinative coordination involving head movement/Lowering and an intriguing contrast between matrix and embedded coordination—and leave them as a challenge for future work.

6.2.1 Bjorkman (2012, 2013)

Before we look at the Passamaquoddy data in more depth, I first present a summary of Bjorkman's (2012, 2013) proposal about the syntax of coordination. We start from the observation that natural language coordination doesn't only express logical conjunction (though it can). In many cases, it also expresses temporal and causal sequencing. One core property of logical conjunction is that it's *symmetrical*: $p \wedge q$ is equivalent to $q \wedge p$. Natural language coordination is sometimes symmetrical—for instance, both of the following sentences express the same information:

(329) a. [$_{\text{IND}}$ Ø-Nikihku-k wiku-w-ok Texas] naka [$_{\text{IND}}$ n-itapi-yik wik-ultu-w-ok Boston].
1-parent-PROX.PL live$_{\text{AI}}$-3-PROX.PL Texas and 1-friend-PROX.PL live$_{\text{AI}}$-PL-3-PROX.PL Boston
'My parents live in Texas and my friends live in Boston.' (EM 2022.08.01)

b. [$_{\text{IND}}$ N-itapi-yik wik-ultu-w-ok Boston] naka [$_{\text{IND}}$ Ø-nikihku-k wiku-w-ok Texas].
1-friend-PROX.PL live$_{\text{AI}}$-PL-3-PROX.PL Boston and 1-parent-PROX.PL live$_{\text{AI}}$-3-PROX.PL Texas
'My friends live in Boston and my parents live in Texas.' (EM 2022.08.01)

In these sentences, we can switch around the order of the conjuncts *nikihkuk wikuwok Texas* 'my parents live in Texas' and *nitapiyik wikultuwok Boston* 'my friends live in Boston' without changing the meaning. We can call coordinations with this property SYMMETRIC COORDINATION.

In contrast, in certain cases natural language coordination is asymmetrical—that is, unlike logical coordination, *p and q* is felt to express something different than *q and p*. This occurs in cases where *q* temporally and/or causally follows from *p*—reversing the order of the conjuncts seems to get the order wrong, in some sense. Consider the following examples:

(330) Context: Due to the heavy rain, some strawberries have started to rot on the bush.

a. [$_{IND}$ Kisi= wisok-olan-Ø wolaku] on [$_{SUB}$ pskihqimins-ok Ø-mace=
PFV= very-rain$_{II}$-3 yesterday and strawberry-PROX.PL 3-start=
mehtolihka-ni-ya].
rot$_{AI}$-N-PL
'It rained a lot yesterday and the strawberries have started to rot.' (EM 2022.08.01)

b. #[$_{IND}$ Pskihqimins-ok mace= mehtolihka-Ø-k] on [$_{IND/SUB}$ kisi= wisok-olan-Ø
strawberry-PROX.PL start= rot$_{AI}$-3-PROX.PL and PFV= very-rain$_{II}$-3
wolaku].
yesterday
#'The strawberries started to rot and it rained a lot yesterday.' (EM 2022.08.01)
EM: "One has to happen before the other."

In this particular case, (330a) is felt to more accurately describe the context provided than (330b). As the consultant comment indicates, (330b) feels off because it presents events in the wrong order—the rain temporally preceded and caused the rotting, so why would you present the rotting event before the rain event? In this case, it seems like the order of conjuncts conveys temporal and causal sequencing, indicating that the second conjunct follows from the first. We can call this kind of coordination ASYMMETRIC COORDINATION.

How should we account for this difference between symmetric and asymmetric coordination? Typical answers to this question have been semantic and pragmatic in nature, with a lively debate between purely pragmatic approaches which take natural language 'and' to denote logical conjunction, with pragmatics deriving asymmetric interpretations (e.g. Grice 1975, Schmerling 1975, Carston 1993, 2002, Blakemore and Carston 2005, a.o.), and other approaches which endow natural language 'and' with a richer denotation than logical conjunction (e.g. Bar-Lev and Palacas 1980, Txurruka 2003, Zeevat and Jasinskaja 2007, a.o.). However, Bjorkman (2012, 2013) makes a novel argument that there's actually a *syntactic* distinction between symmetric and asymmetric coordination, and proposes that any ambiguity between symmetric and asymmetric readings is actually *syntactic* rather than pragmatic.

More specifically, Bjorkman argues that asymmetric coordination involves coordinating TPs, and symmetric coordination involves coordinating CPs. The core argument for this comes from the behavior of embedded coordination in clausal complements. In particular, Bjorkman notes that the presence/absence of a complementizer in the second conjunct of an embedded coordination correlates with which readings are available. Below I provide Spanish (Romance) examples based on Bjorkman's (2012, 2013) original English examples (she also notes that Greek (Hellenic) and Dutch (Germanic) behave the same as well):[8]

(331) **Symmetric context:** The newspaper ran two unrelated stories yesterday. In the first it reported that the incumbent mayor was defeated in yesterday's election; in the second it reported on a riot that occurred in the wake of last night's hockey game.

[8]The Spanish judgments come from one male native Spanish speaker in his mid-20s who grew up in and currently lives in Madrid.

a. #El periódico anunció [**que** [se ha elegido
the.M.SG newspaper announce.PFV.PST.3SG **that** SE have.PRS.3SG elected
un nuevo alcalde] y [hubo disturbio-s]].
a.M.SG new.M.SG major and have.PFV.PST.3SG disturbance-PL

#'The newspaper reported [**that** [a new mayor was elected] and [there was a riot]].' (Spanish)

b. El periódico anunció [**que** se ha elegido un
the.M.SG newspaper announce.PFV.PST.3SG **that** SE have.PRS.3SG elected a.M.SG
nuevo alcalde] y [**que** hubo disturbio-s].
new.M.SG major and **that** have.PFV.PST.3SG disturbance-PL

'The newspaper reported [**that** a new mayor was elected] and [**that** there was a riot].' (Spanish)

(332) **Asymmetric context:** An engineer said: "The dam broke. As a direct consequence of that, the valley below the dam flooded."

a. El ingeniero ha confirmado [**que** [se quebró
the.M.SG engineer have.PRS.3SG confirmed **that** SE break.PFV.PST.3SG
la presa] y [se ha inundado el valle]].
the.F.SG dam and SE have.PRS.3SG flooded the.M.SG valley

'The engineer has confirmed [**that** [the dam broke] and [the valley flooded]].' (Spanish)

b. El ingeniero ha confirmado [**que** se quebró la
the.M.SG engineer have.PRS.3SG confirmed **that** SE break.PFV.PST.3SG the.F.SG
presa] y [**que** se ha inundado el valle].
dam and **that** SE have.PRS.3SG flooded the.M.SG valley

'The engineer has confirmed [**that** the dam broke] and [**that** the valley flooded].' (Spanish)

In the (a) examples, there is no *que* 'that' in the second conjunct, a state of affairs we must understand to indicate TP coordination under a single CP, as Spanish does not generally allow embedded finite clauses without overt complementizers. In the (b) examples, there is a *que* 'that' in each conjunct, indicating that both conjuncts are CP-sized. The striking observation is that TP coordination is impossible in the asymmetric context (331a)—in order to convey that the election and riot are unrelated, we need CP coordination (331b). In contrast, in the asymmetric context (332), it *is* possible to do TP coordination, as well as CP coordination. Bjorkman's conclusion is that TP coordination *forces* an asymmetric interpretation, resulting in it only being felicitous in an asymmetric context, whereas CP coordination is true logical conjunction, compatible with both symmetric and asymmetric contexts. So: asymmetric coordination is TP coordination, and symmetric coordination is CP coordination.

6.2.2 Symmetric and asymmetric coordination in Passamaquoddy

With that background out of the way, let's turn to how symmetric and asymmetric coordination is realized in Passamaquoddy. We'll split the cases into matrix and embedded coordination, as we'll see they behave in slightly different ways. In all cases, matching coordination patterns with symmetric coordination and subordinative coordination patterns with asymmetric coordination.

Matrix coordination in Passamaquoddy

Let's begin with matrix coordination. Matrix matching coordination is acceptable in symmetric contexts (329, repeated below), but unacceptable in asymmetric contexts (334):

(333) Symmetric context: matching coordination OK

a. [$_{\text{IND}}$ Ø-Nikihku-k wiku-Ø-ok Texas] naka [$_{\text{IND}}$ n-itapi-yik
1-parent-PROX.PL live$_{\text{AI}}$-3-PROX.PL Texas and 1-friend-PROX.PL
wik-ultu-Ø-wok Boston].
live$_{\text{AI}}$-PL-3-PROX.PL Boston
'My parents live in Texas and my friends live in Boston.' (EM 2022.08.01)

b. [$_{\text{IND}}$ N-itapi-yik wik-ultu-Ø-wok Boston] naka [$_{\text{IND}}$ Ø-nikihku-k
1-friend-PROX.PL live$_{\text{AI}}$-PL-3-PROX.PL Boston and 1-parent-PROX.PL
wiku-Ø-wok Texas].
live$_{\text{AI}}$-3-PROX.PL Texas
'My friends live in Boston and my parents live in Texas.' (EM 2022.08.01)

(334) Asymmetric context: matching coordination #

a. Context: Due to the heavy rain, some strawberries have started to rot on the bush.[9]
#[$_{\text{IND}}$ Kis-olan-Ø wolaku] on [$_{\text{IND}}$ mace= mehtolihka-htu-Ø-wok
PFV-rain$_{\text{II}}$-3 yesterday and start= rot$_{\text{AI}}$-PL-3-PROX.PL
pskihqimins-ok].
strawberry-PROX.PL
Intended: 'It rained yesterday and the strawberries started to rot.' (GP, MA 2022.07.25)

b. Context: A new chief got elected, and then we celebrated their election.
#[$_{\text{IND}}$ Kisi= pkon-a piley sakom wolaku] naka [$_{\text{IND}}$ n-kisi=
PFV= pick$_{\text{TA}}$-3OBJ new chief yesterday and 1-PFV=
wiqhopalt-ulti-pon].
celebrate$_{\text{AI}}$-PL-1PL
Intended: 'A new chief was elected yesterday and we celebrated.' (GP, MA 2023.04.25)

[9]You may also have noticed a different coordinator here: *on* 'and' instead of *naka* 'and'. I don't think this is relevant, as both *on* and *naka* are compatible with both matching and subordinative coordination (even though *on* is typically described as selecting for subordinative verbs). Here's a naturally-occurring corpus example from a narrative to illustrate *on* with independent:

In (333), both conjuncts are temporally and causally unrelated, and can be switched around without changing the meaning of the overall sentence, indicating symmetric coordination. In this case, it's possible for both conjuncts to be independent—that is, it's possible to have matching coordination. In contrast, in (334), both contexts favor asymmetric interpretations: in (334a), the rain caused the strawberries to start to rot, and in (334b), the election of the new chief was the cause of the celebration. In these kinds of contexts, having matching coordination (both conjuncts independent) is felt by speakers to be less natural, as if you're failing to mention the causal and temporal link between the two conjuncts that you should be conveying.

Turning now to the subordinative coordination counterparts of these sentences, we can note that, strikingly, they are all acceptable:

(335) Symmetric context: subordinative coordination OK

a. [$_{\text{IND}}$ Ø-Nikihku-k wiku-Ø-wok Texas] naka [$_{\text{SUB}}$ n-itapi-yik Ø-wik-ulti-ni-ya Boston].
1-parent-PROX.PL live$_{\text{AI}}$-3-PROX.PL Texas and 1-friend-PROX.PL 3-live$_{\text{AI}}$-PL-N-PL Boston
'My parents live in Texas and my friends live in Boston.' (EM 2022.08.01)

b. [$_{\text{IND}}$ N-itapi-yik wik-ultu-Ø-wok Boston] naka [$_{\text{SUB}}$ Ø-nikihku-k Ø-wiki-ni-ya Texas].
1-friend-PROX.PL live$_{\text{AI}}$-PL-3-PROX.PL Boston and 1-parent-PROX.PL 3-live$_{\text{AI}}$-N-PL Texas
'My friends live in Boston and my parents live in Texas.' (EM 2022.08.01)

(336) Asymmetric context: subordinative coordination OK

a. Context: Due to the heavy rain, some strawberries have started to rot on the bush.
[$_{\text{IND}}$ Kis-olan-Ø wolaku] on [$_{\text{SUB}}$ Ø-mace= mehtolihka-hti-ni-ya pskihqimins-ok].
PFV-rain$_{\text{II}}$-3 yesterday and 3-start= rot$_{\text{AI}}$-PL-N-PL strawberry-PROX.PL
'It rained yesterday and the strawberries have started to rot.' (GP, MA 2022.07.25)

(i) Mahkiyewossis '-pomiya-ni-ya, on [$_{\text{IND}}$ solahki=te **'t-iy-a-l** ...]
little.while 3-go.along$_{\text{AI}}$-N-PL and suddenly=EMPH **3-say$_{\text{TA}}$-3OBJ-OBV.SG**
'They go on for a little way, and all of a sudden he says to him...' https://pmportal.org/videos/ant-story

I suspect *on* is most naturally used in contexts involving temporal succession (maybe it's better glossed as '(and) then'), which usually correlates with asymmetric coordination but doesn't always. In (i), I would suggest that the narrator has decided to use symmetric coordination along with *on* 'and', presenting the going-along and the saying as unrelated events, despite the temporal succession, to convey a sudden break in the narrative for dramatic effect. As a sidenote, *on* is only used for clausal/VP coordination, wheres *naka* is a general-purpose coordinator also used for DP coordination.

b. Context: A new chief got elected, and then we celebrated their election.

[$_{\text{IND}}$ Kisi= pkon-a piley sakom wolaku] naka [$_{\text{SUB}}$ n-kisi=
PFV= pick$_{\text{TA}}$-3OBJ new chief yesterday and 1-PFV=

wiqhopalt-ulti-ne-n].
celebrate$_{\text{AI}}$-PL-N-1PL

'A new chief was elected yesterday and we celebrated.' (GP, MA 2023.04.25)

Matrix subordinative coordination in symmetric contexts is acceptable (335), and, additionally, it's the only natural way to express asymmetric coordination (336), something that was impossible with matching coordination.

Strong evidence that it's really the temporal/causal relations in the context that lead to subordinative coordination comes from changing the asymmetric contexts to symmetric ones where there is no temporal or causal link between the two conjuncts. For instance, in the strawberry context, if we modify it so that the speaker doubts the causal relationship between the rain and the rotting, then matching coordination suddenly becomes possible, and we can also reverse the order of the conjuncts:

(337) Context: It rained a lot yesterday, and the strawberries have started to rot, but you think that the rain has nothing to do with the rot—you think the strawberry bush has a disease.

a. [$_{\text{IND}}$ Kisi= wisok-olan-Ø wolaku] on [$_{\text{IND}}$ pskihqimins-ok mace=
PFV= very-rain$_{\text{II}}$-3 yesterday and strawberry-PROX.PL start=

mehtolihka-Ø-k], kenoq nt-olitahas ksinuhkewakon nit eluhkewi-k.
rot$_{\text{AI}}$-3-PROX.PL but 1-think$_{\text{AI}}$ sickness that.IN.SG IC.work$_{\text{II}}$-3CJ

'It rained a lot yesterday and the strawberries have started to rot, but I think it's the work of disease.' (EM 2022.08.01)

b. [$_{\text{IND}}$ Pskihqimins-ok mace= mehtolihka-Ø-k] naka [$_{\text{IND}}$ kisi= wisok-olan-Ø
strawberry-PROX.PL start= rot$_{\text{AI}}$-3-PROX.PL and PFV= very-rain$_{\text{II}}$-3

wolaku], kenoq nt-olitahas ksinuhkewakon nit eluhkewi-k.
yesterday but 1-think$_{\text{AI}}$ sickness that.IN.SG IC.work$_{\text{II}}$-3CJ

'The strawberries have started to rot and it rained a lot yesterday, but I think it's the work of disease.' (EM 2022.08.01)

Example (337a) shows us that in this particular context, we can make the second conjunct independent, matching the first. Example (337b) demonstrates the core property of symmetric coordination—we can change the order of the conjuncts.

Similarly, in the election context, if we change it so that the celebration is unrelated to the election, then matching coordination becomes possible as well:

(338) Context: Somehow, a new chief that everyone disliked got elected yesterday. Additionally, yesterday we celebrated Deanna graduating from medical school.

[$_{IND}$ Kisi= pkon-a piley sakom wolaku] naka [$_{IND}$ n-kisi= wiqhopalt-ulti-pon],
PFV= pick$_{TA}$-3OBJ new chief yesterday and 1-PFV= celebrate$_{AI}$-PL-1PL

kenoq n-kisi= wiqhopalt-ulti-pon ‘ciw Tiyena eli nutsihpiluwe-t.
but 1-PFV= celebrate$_{AI}$-PL-1PL for Deanna IC.C be.doctor$_{AI}$-3CJ

‘A new chief was elected yesterday and we celebrated, but we celebrated for Deanna because she became a doctor.’ (GP, MA 2023.04.25)

Here, we’ve severed the causal link between the election and the celebration, rendering them wholly separate events, and this allows for matching coordination to be felicitous for this sentence, just like we saw above for the rain context.

Interestingly, subordinative coordination seems to remain acceptable in these cases:

(339) a. Context: same as (337).

[$_{IND}$ Kis-olan-Ø wolaku], on [$_{SUB}$ Ø-mace= mehtolihka-hti-ni-ya
PFV-rain$_{II}$-3 yesterday and 3-start= rot$_{AI}$-PL-N-PL

pskihqimins-ok], kenoq ma n-pehki= kcicihtu-w-on nit weci=
strawberry-PROX.PL but NEG 1-clean= know$_{TI}$-NEG-N that.IN.SG IC.from=

mace= mehtolihka-hti-t eli kis-ola-k kosona tan.
start= rot$_{AI}$-PL-3CJ IC.C PFV-rain$_{II}$-CJ or WH

‘It rained yesterday and the strawberries started to rot, but I’m not sure if the reason they started to rot is because it rained or not.’ (GP, MA 2023.07.25)

b. Context: same as (338).

[$_{IND}$ Kisi= pkon-a piley sakom wolaku] naka [$_{SUB}$ n-kisi=
PFV= pick$_{TA}$-3OBJ new chief yesterday and 1-PFV=

wiqhopalt-ulti-ne-n], kenoq n-kisi= wiqhopalt-ulti-pon ‘ciw Tiyena eli
celebrate$_{AI}$-PL-N-1PL but 1-PFV= celebrate$_{AI}$-PL-1PL for Deanna IC.C

nutsihpiluwe-t.
be.doctor$_{AI}$-3CJ

‘A new chief was elected yesterday and we celebrated, but we celebrated for Deanna because she became a doctor.’ (GP, MA 2023.04.25)

Thus, it seems like subordinative coordination allows both symmetric and asymmetric interpretations, at least for matrix coordination. Matching coordination, in contrast, is only used in symmetric contexts.

I summarize the state of affairs for matrix coordination in Table 6.2.

	Symmetric context	Asymmetric context
Matching coordination	✓	#
Subordinative coordination	✓	✓

Table 6.2: Matrix coordination

If Bjorkman (2012, 2013) is right that asymmetric coordination is TP coordination, then a tantalizing analytic option becomes available to us: asymmetric coordination forces subordinative coordination in Passamaquoddy because subordinative clauses are TPs. However, there's a striking difference between the Passamaquoddy matrix coordination data and Bjorkman's data from embedded coordination: she found that CP coordination is acceptable in *both* symmetric and asymmetric contexts, whereas TP coordination is acceptable *only* in asymmetric contexts. But before we dig more into this difference, let's turn to embedded coordination in Passamaquoddy, which, as we'll see, behaves much more like Bjorkman's data.

Embedded coordination in Passamaquoddy

Bjorkman (2012, 2013) data involved embedded coordination. So, at this point, there are two main hypotheses about why Bjorkman's data and the Passamaquoddy matrix coordination data pattern differently—*(i)* it's a difference between English (and Dutch, Greek, and Spanish) on the one hand and Passamaquoddy on the other, or *(ii)* it's a difference between matrix and embedded coordination (which we can't see in the other languages due to a regular lack of overt C in matrix clauses). We need to examine embedded coordination in Passamaquoddy to tease these apart.

In a symmetric context, involving two temporally and/or causally distinct events, we find that embedded matching coordination is possible but embedded subordinative coordination is not—speakers generally comment that using subordinative coordination here makes it seem like the events are connected in a way that doesn't match the intended context:

(340) Symmetric context: A new chief that people don't like got elected, and, separately, we were celebrating Deanna becoming a doctor.

a. N-kocicihtu-n [$_{CJ}$ **eli** kisi= pkon-ut piley sakom skat wen
1-know$_{TI}$-N IC.C PFV= pick$_{TA}$-X:3CJ new chief NEG who
sapitaham-a-h-q] naka [$_{CJ}$ **eli** kisi= wiqhopalt-ulti-yek].
IC.trust$_{TA}$-3OBJ-NEG-3CJ and IC.C PFV= celebrate$_{AI}$-PL-1PL.CJ
'I know [**that** a new chief no one trusts was elected] and [**that** we celebrated].'
(GP, MA 2023.04.25)

b. #N-kocicihtu-n [$_{CJ}$ **eli** [$_{CJ}$ kisi= pkon-ut piley sakom skat wen
1-know$_{TI}$-N IC.C PFV= pick$_{TA}$-X:3CJ new chief NEG who
sapitaham-a-h-q] naka [$_{SUB}$ n-kisi= wiqhopalt-ulti-ne-n]].
IC.trust$_{TA}$-3OBJ-NEG-3CJ and 1-PFV= celebrate$_{AI}$-PL-N-1PL
#'I know [**that** [a new chief no one trusts was elected] and [we celebrated]].'
MA: "That makes it sound like we're celebrating him [the chief]." (GP, MA 2023.04.25)

(341) Symmetric context: Yesterday, the community was all gathering together for a celebration. Separately, but at the same time, Peter saw a cat stuck in a tree and then rescued it. The next day, a reporter writes about these two events in the local paper.

a. ’-Kis-uwikhom-on [$_{CJ}$ **eli** maqa-ha-hti-mo-k] naka [$_{CJ}$ **eli** Piyel
3-pfv-write$_{TI}$-n ic.C together-go$_{AI}$-pl-X-cj and ic.C Peter

kis-aposiy-a-t psuwis-ol].
pfv-save$_{TA}$-3obj-3cj cat-obv.sg

‘He wrote [**that** there was a gathering] and [**that** Peter saved a cat].’ (EM 2023.07.11)

b. # ’-Kis-uwikhom-on [$_{CJ}$ **eli** [$_{CJ}$ maqa-ha-hti-mo-k] naka [$_{SUB}$ Piyel
3-pfv-write$_{TI}$-n ic.C together-go$_{AI}$-pl-X-cj and Peter

’-kis-aposiy-a-n psuwis-ol]].
3-pfv-save$_{TA}$-3obj-obv.sg cat-obv.sg

‘He wrote [**that** [there was a gathering] and [Peter saved a cat]].’ (EM 2023.07.11)
EM: “It does sound less natural.”

In each of these examples, we have verbs that typically embed conjunct clauses (*’kocicihtun* ‘know’ and *’kisuwikhomon* ‘write’), and we’re embedding conjunct clauses with the complementizer *eli*. In the election context (340), we can see that conjoining two conjunct clauses with two instances of *eli* is possible (340a),[10] but doing subordinative coordination, with the second conjunct being subordinative and thus lacking *eli*, is not (340b). This is exactly parallel to Bjorkman’s findings—TP coordination in symmetric contexts is impossible—and is different from matrix coordination, where subordinative coordination was possible in symmetric contexts.

Turning now to asymmetric contexts, where the second conjunct temporally and/or causally follows from the first, we find some conflicting data. Subordinative coordination is clearly possible here, but there’s some contradictory results about matching coordination:

(342) Asymmetric context: A new chief was elected and we celebrated their election.

a. N-kocicihtu-n [$_{CJ}$ **eli** piley sakom kisi= pkon-ut] naka [$_{CJ}$ **eli** kisi=
1-know$_{TI}$-n ic.C new chief pfv= pick$_{TA}$-X:3cj and ic.C pfv=

wiqhopalt-ulti-yek].
celebrate$_{AI}$-pl-1pl.cj

‘I know [**that** a new chief was elected] and [**that** we celebrated].’ (GP, MA 2023.04.25)

[10]One might wonder if it’s possible to conjoin two conjunct clauses under one *eli*. It seems not:

(i) N-kocicihtu-n [$_{CJ}$ **eli** [$_{CJ}$ piley sakom kisi= pkon-ut], naka [$_{CJ}$ kisi= wiqhopalt-ulti-yek]].
1-know$_{TI}$-n ic.C new chief pfv= pick$_{TA}$-X:3cj and pfv= celebrate$_{AI}$-pl-1pl.cj

Intended: ‘I know [**that** [a new chief was elected] and [we celebrated]].’ (GP, MA 2023.04.25)
MA: “It doesn’t make sense without it [*eli*] for us.”

I don’t know what the source of this ungrammaticality is. I suspect it might tell us something about the morphophonology of initial change and how it “distributes” over conjuncts, but this is an issue for other work to tackle.

b. N-kocicihtu-n [$_{CJ}$ **eli** [$_{CJ}$ piley sakom kisi= pkon-ut] naka [$_{SUB}$ n-kisi=
1-know$_{TI}$-N IC.C new chief PFV= pick$_{TA}$-X:3CJ and 1-PFV=
wiqhopalt-ulti-ne-n]].
celebrate$_{AI}$-PL-N-1PL
'I know [**that** [a new chief was elected] and [we celebrated]].' (GP, MA 2023.04.25)

(343) Asymmetric context: There was a huge storm the other day while Roger was at home, and it caused a tree in his backyard to blow over and fall down.

a. ??Roger itom-Ø [$_{IND}$ kisi= =yaq wisok-amoqessu-Ø] on [$_{IND}$ ehta =yaq opos
Roger say$_{AI}$-3 PFV= =REP very-storm$_{II}$-3 and EMPH =REP tree
kisi= kip-olam-su-Ø pahkak w-ik-uwa-k].
PFV= fall-wind-AI-3 behind 3-house-PL-LOC
Intended: 'Roger said [**that** there was a big storm] and [**that** a tree got blown over in their backyard].' (EM 2023.07.11)

b. Roger itom-Ø [$_{IND}$ kisi= =yaq wisok-amoqessu-Ø] on [$_{SUB}$ ehta =yaq opos
Roger say$_{AI}$-3 PFV= =REP very-storm$_{II}$-3 and EMPH =REP tree
'-kisi= kip-olam-si-n pahkak w-ik-uwa-k].
3-PFV= fall-wind-AI-N behind 3-house-PL-LOC
'Roger said [**that** [there was a big storm] and [a tree got blown over in their backyard]].' (EM 2023.07.11)

In (342), we have an asymmetric context, where we celebrated a new chief getting elected. In this case, it's possible to embed two *eli*-full conjunct clauses (342a), as well as embed a subordinative coordination (342b). In (343), we have another asymmetric context, where a big storm caused a tree to fall over. In this case, we're embedding independent clauses under *itom* 'say' (which prefers independent complements). We can know that we're not embedding quotations because of the presence of the reportative clitic *yaq*, which here must be anchored to the speaker and not Roger. The reason for this is that Roger doesn't have reportative evidence for these events but rather something more direct, as he was there to experience them—thus, whatever Roger said wouldn't have had a *yaq* in it. In this case, matching coordination was dispreferred (343a), whereas subordinative coordination was fully acceptable (343b).

At this point, I'm not sure what the difference in judgements between (342) and (343) stems from. There are a number of possibilities—here are three posisble candidates: *(i)* it could be some kind of difference in the contexts that I'm not controlling for; *(ii)* it could be a difference between conjunct and independent; or *(iii)* it could be a difference between speakers or dialects—(342) represents the judgements of Grace Paul and Margaret Apt, who are both Passamaquoddy from Sipayik, and (343) represents the judgements of Edwina Mitchell, who is Wolastoqey from Neqotkuk.

It's also worth noting that, during the session in which I elicited (343), matching coordination (343a) is actually what was first offered for this particular context, before I constructed the subordinative coordination counterpart of the sentence (343b), which was eventually judged to be better than the original (this is why I've marked the judgment as ?? rather than #, as that sentence wasn't immediately flat-out rejected). So a fourth possibility could just be that (343a) *is* actually possible in this context, but it's just that (343b) is slightly better/conveys the cause-effect relationship in a more explicit way. Indeed, this is exactly the kind of judgement Bjorkman (2012, 2013) reports for English, where doing CP coordination in an symmetric context feels true and felicitous, but not as fully informative as TP coordination. In any event, embedded matching coordination in asymmetric contexts in Passamaquoddy needs further investigation.

But in the meantime, we can summarize the results so far for embedded coordination in Passamaquoddy as follows:

	Symmetric context	Asymmetric context
Matching coordination	✓	?
Subordinative coordination	#	✓

Table 6.3: Embedded coordination

This now essentially matches the pattern Bjorkman reports (also looking at embedded coordination), which I summarize in Table 6.4.

	Symmetric context	Asymmetric context
CP coordination	✓	✓
TP coordination	#	✓

Table 6.4: The Bjorkman pattern

The only potential difference is the matching coordination/CP coordination in asymmetric contexts cell, which bears further investigating in Passamaquoddy, as I've discussed.

So: what do we make of this data? As we've seen, embedded matching coordination essentially behaves the same as embedded CP coordination as discussed by Bjorkman, and embedded subordinative coordination behaves exactly the same as embedded TP coordination. So, I propose to take this parallel seriously: matching coordination is coordination of two CPs, whereas subordinative coordination is coordination of two TPs under a single C. This allows us to understand the morphological difference between matching and subordinative coordination: the right conjunct has the full array of CP-level morphology in matching coordination (e.g. peripheral suffix, *eli*/initial change) because it's a CP (and we have CP coordination), whereas the right conjunct is subordinative in subordinative coordination because it's a TP (and we have TP coordination).

A complication I won't analyze

There's one further complication that Bjorkman doesn't doesn't discuss, which seem to apply to both Passamaquoddy and English (and perhaps more universally). There are certain cases where there is no temporal or causal connection between the two conjuncts, and yet we can still get TP coordination (even when embedded):

(344) Context: Right now, there's rain in Sipayik and snow in Motahkomikuk.

a. N-kocicihtu-n [$_{\text{CJ}}$ etol-ola-k Sipayik] naka [$_{\text{CJ}}$ etoli= psa-k
1-know$_{\text{TI}}$-N IC.PROG-rain$_{\text{II}}$-CJ Sipayik and IC.PROG= snow$_{\text{II}}$-CJ
Motahkomikuk].
Motahkomikuk
'I know [**that** it's raining in Sipayik] and [**that** it's snowing in Motahkomikuk].'
(GP, MA 2022.07.12)

b. N-kocicihtu-n [$_{\text{CJ}}$ etol-ola-k Sipayik] naka [$_{\text{SUB}}$ toli= psan-Ø
1-know$_{\text{TI}}$-N IC.PROG-rain$_{\text{II}}$-CJ Sipayik and PROG= snow$_{\text{II}}$-3
Motahkomikuk].
Motahkomikuk
'I know [**that** [it's raining in Sipayik] and [it's snowing in Motahkomikuk]].'
(GP, MA 2022.07.12)

There's no obvious way that rain in Sipayik could cause snow in Motahkomikuk, and these events are cotemporaneous—one doesn't follow the other. Thus, this should be a symmetric context. In (344a), we have CP coordination, which is to be expected, but in (344b) we see we can have TP coordination (in both Passamaquoddy and English), which seems like it's in conflict with the other data we've seen. What's going on?

One possible way of thinking about the data in (344), as suggested by Amy Rose Deal (p.c.), is that these are contexts where there is no possibility of confusing an asymmetric and a symmetric interpretation. The generalization would then be that, in these kinds of contexts, both CP and TP coordination are possible. It's only when there could be a possibility of confusion that we start to get Bjorkman effects, intuitively as a way of disambiguating potential ambiguities, perhaps. The challenge then would be to figure out how this kind of pragmatic reasoning should map onto the syntax. In any event, I leave this particular issue aside for future work.

6.2.3 Conclusion and unanswered questions

We began this section on coordination with the observation that there are two kinds of (clausal) coordination structures in Passamaquoddy: matching coordination and subordinative coordination. I then showed that matching coordination (at least of independent or conjunct clauses) has a symmetric interpretation, whereas subordinative coordination has an asymmetric interpretation. Given Bjorkman's (2012, 2013) argument that CP coordination is symmetric coordination and TP coordination is asymmetric coordination, I proposed that matching coordination is coordination of two CPs and subordinative coordination is coordination of two TPs. This analysis allows use to understand the distribution of clause types in coordination, since independent and conjunct clauses are CPs whereas subordinative clauses are TPs, and also the different kinds of interpretations that matching and subordinative coordination give rise to.

However, as promising as this proposal is, there are a number of unanswered questions remaining and problems to be solved before we have a full analysis. I unfortunately do not have answers or solutions, but I will present these issues and provide some speculation and potential analytic paths forward for future research. I discuss two here: *(i)* the morphology of the first conjunct in subordinative coordination (which has the full array of CP-level morphology) looks like it has to be derived in a CSC-violating way; and *(ii)* there is an interesting contrast between matrix and embedded coordination in terms of how CP/TP coordination maps onto symmetric and asymmetric interpretations.

CSC violations?

In subordinative coordination, the first conjunct contains the full array of CP-layer morphology, and participates in the full range of CP-layer syntactic-semantic phenomena, as we can see in the examples below:

(345) a. [$_{\text{IND}}$ Ø-Nikihku-k wiku-Ø-**wok** Texas] naka [$_{\text{SUB}}$ n-itapi-yik Ø-wik-ulti-ni-ya Boston].
1-parent-PROX.PL live$_{\text{AI}}$-3-**PROX.PL** Texas and 1-friend-PROX.PL 3-live$_{\text{AI}}$-PL-N-PL Boston
'My parents live in Texas and my friends live in Boston.' (EM 2022.08.01)

b. **N-kocicihtu-n** [$_{\text{CJ}}$ etol-ola-k Sipayik] naka [$_{\text{SUB}}$ toli= psan-Ø Motahkomikuk].
1-know$_{\text{TI}}$-N IC.PROG-rain$_{\text{II}}$-CJ Sipayik and PROG= snow$_{\text{II}}$-3 Motahkomikuk
'I **know** it's raining in Sipayik and snowing in Motahkomikuk.' (GP, MA 2022.07.12)

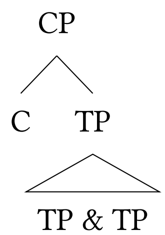
c. **Keq** [$_{\text{CJ}}$ kis-onuhm-on ⟨keq⟩] naka [$_{\text{SUB}}$ kt-ol-aqosom-on ⟨keq⟩] wolaku?
what IC.PFV-buy$_{\text{TI}}$-2SG.CJ and 2-thus-cook$_{\text{TI}}$-N yesterday
'**What** did you [buy ⟨what⟩] and [cook ⟨what⟩] yesterday?' (EM 2022.12.07)

d. [$_{\text{IMP}}$ Wihqon-**uk** wot] naka [$_{\text{SUB}}$ k-mah-a-ni-ya].
take$_{\text{TA}}$-**2PL.IMP** this.AN and 2-eat$_{\text{TA}}$-3OBJ-N-PL
'Take this and eat it.' https://pmportal.org/dictionary/wihqonal

In (345a), we see that the first conjunct can contain an exponent of C (the peripheral suffix), even when the subordinative conjunct lacks it (if initial change expones a CP-layer head, we see the same thing in (345b–c) as well). In (345b), we see that the selectional properties of *'kocicihtun* 'know' (which prefers conjunct) are satisfied purely by the first conjunct—the second remains steadfastly subordinative. In (345c), we see that a conjunct-triggering *keq* 'what' question only requires that the first conjunct be conjunct—the second can be subordinative. And finally, (345d) illustrates that the first conjunct can be an imperative, and the subordinative conjunct inherits its directive force.

There's something deeply puzzling about these facts. If subordinative coordination is TP coordination, then it should have the following kind of structure:

(346)



And if words are built up by mechanisms like head movement and Lowering, which (presumably) in the general case show island effects,[11] then in order for CP-level morphology to end up only on the first verb, either the first verb would need to move into the CP domain, violating the CSC, or CP-layer morphology would need to Lower into the first conjunct, again violating the CSC. Even more puzzling, I've already shown earlier in example (327) that subordinative coordination *does* in fact obey the CSC (at least for *wh* movement). So how is it that we don't seem to be getting CSC effects here?

I don't know what the right answer to this puzzle is. However, there are two kinds of solutions I can imagine. The first is to accept that these really are genuine instances of CSC-violating head movement (or Lowering), and try to figure out what syntactic and/or semantic properties allow for this particular kind of CSC violation. There is some precedence for this. For instance, in the domain of Ā movement, it's well known that the same kinds of asymmetric, narrative-progressing uses of coordination allow for CSC violations (Ross 1967, Lakoff 1986, Postal 1998, Altshuler and Truswell 2022, a.m.o.)—though in this particular case (Lakoff's "Type A" coordinations) it's *noninitial* conjuncts that can be extracted out of. Similarly, Johnson (2000, 2002, 2004, 2009) argues that A movement is not subject to the CSC (see also Lin 2002). Finally, and perhaps most relevantly, Bošković (2013, 2020) and Flor and Zompì (2021) propose that it *is* in fact possible to violate the CSC with head movement, at least in certain cases. Passamaquoddy subordinative coordination could then be another instance of this—the project would then be to figure out what properties allow for CSC obviation with particular kinds of head movement, and what properties lead to head movement obeying the CSC.

The other answer to this puzzle is to accept that the CSC rules out a head movement or Lowering analysis of how verbal morphology is built up in Passamaquoddy (at least how CP-layer material gets on the verb), and explore other options. The question of how verbs are built up in Algonquian languages is an extremely difficult one, and there is no generally accepted answer (see Bruening 2019 for discussion of some of the difficulties in Passamaquoddy). The behavior of subordinative coordination could be telling us that the relevant syntactic and/or morphology mechanisms at play *aren't* head movement or Lowering, but rather something else—but what that something else is I do not know.

Matrix vs. embedded coordination?

The second open question is the contrast illustrated in Table 6.5 between matrix and embedded coordination. That is, while CP coordination is always good in symmetric contexts, and TP

[11] As illustrated by data like *****Has** *[Agnes ⟨has⟩ gotten more cat food] and [Luna can now eat]?*, where we see that we can't head-move an auxiliary out of only one conjunct, and **Luna ⟨-ed⟩ [grab-***ed** *the hairtie] and [play with it]*, where we see that we can't Lower into just one conjunct.

		Symmetric context	Asymmetric context
Matrix coordination	CP coordination	✓	#
	TP coordination	✓	✓
Embedded coordination	CP coordination	✓	✓/?
	TP coordination	#	✓

Table 6.5: Matrix vs. embedded coordination

coordination is always good in asymmetric contexts, the possible "mismatches" differ between matrix and embedded coordination: symmetric TP coordination is possible in matrix contexts, but it's asymmetric CP coordination that's possible in embedded contexts. How do we explain this difference?

One insight that could get us part of the way to an answer is Bassi and Bondarenko's (2021) proposal that it's impossible to genuinely coordinate CP complements, as that would result in an incoherent meaning (see Bassi and Bondarenko 2021: §4 for the details). So, they argue, all instances of apparent embedded CP coordination must actually result from something like conjunction reduction, as follows:

(347) Yvette thinks [**that** Agnes is home] and [**that** Luna is playing with her].
⇒ [Yvette thinks [**that** Agnes is home]] and [~~Yvette thinks~~ [**that** Luna is playing with her]].

If true, we can maybe exploit the following idea to solve our problem: matrix CP coordination *is* in fact possible, whereas embedded CP coordination is not. This could allow us some insight into the top right cell of our tables. If we say that CP coordination is in fact *never* able to result in an asymmetric interpretation, then the reason why (apparent) embedded coordination of two CPs is able to result in an asymmetric interpretation of those two CPs is because we haven't actually coordinated them—we've actually done a much larger, matrix coordination. Of course, a more careful working-out of this intuition remains to be done, and this doesn't obviously explain the contrast in the lower left cell, but this is perhaps a promising path forward.

6.3 Conclusion

In this section, I've taken the conclusions from Chapter 5—namely, that conjunct and independent clauses are CP-sized and subordinative clauses are TP-sized—and shown how we can apply insights from Wurmbrand and Lohninger (2023) on clausal complementation and Bjorkman (2012, 2013) on coordination to understand quite a bit of the distribution of each clause type. More specifically, I showed that independent, conjunct, and subordinative clauses follow Wurmbrand and Lohninger's Implicational Complementation Hierarchy, with subordinative complements being reserved for the smaller situation and event complements, and independent and conjunct being in principle available for all complement types but most commonly being propositional complements. I also showed that subordinatives lacking a CP layers helps us explain why subordinative coordination correlates asymmetric interpretation, given Bjorkman's proposal that asymmetric coordination is TP coordination.

As a parting note (and challenge for future work), I'd like to point out that my analysis here is not complete—it's lacking a properly worked-out semantics of *why* exactly different predicates require clausal complements of different semantic types, and also lacks a worked out semantics for *why* exactly TP coordination leads to asymmetric readings, whereas CP coordination leads to symmetric readings (though see Bjorkman 2012 for a tentative proposal, and Bassi and Bondarenko 2021 for an analysis of embedded coordination (and disjunction)). I have unfortunately not been able to tackle these deeper theoretical questions here—but I hope to have convincingly argued for at least the *syntactic* part of the analysis, and shown how Passamaquoddy complementation and coordination fits into the larger crosslinguistic picture.

Chapter 7

Conclusion

In Part I, we closely examined various issues relating to clause type and clause size in Passamaquoddy. The main conclusions are the different clause types systematically vary in terms of their structural size—independent clauses are CPs, conjunct clauses can either be larger, phasal CPs or smaller, non-phasal CPs, and subordinative clauses are bare TPs—and that these clause size differences naturally explain the distribution of each clause type in complementation and coordination structures, following work like Wurmbrand and Lohninger (2023) and Bjorkman (2012, 2013).

We began the discussion in Chapter 4 with a descriptive survey of the morphological and distributional properties of each clause type—independent, conjunct, and subordinative. I provide a summary of the distribution of each clause type, divided up into (what I hope are) more tractable categories:

- **Independent**:
  1. default large clause (matrix clauses without Ā movement, adjunct clauses without *wh* movement, embedded main clause phenomena)

  residue: independent *wh* questions

- **Changed conjunct**:
  1. Ā movement (*wh* questions, relative clauses, temporal adjuncts, focus, comparatives, exclamatives, presentatives)
  2. large clauses with complementizers (proposition complements, *eli* 'because' clauses, maybe *weci* purpose clauses)

  residue: *cika(w)* 'even though' clauses, *weci* purpose clauses (maybe)

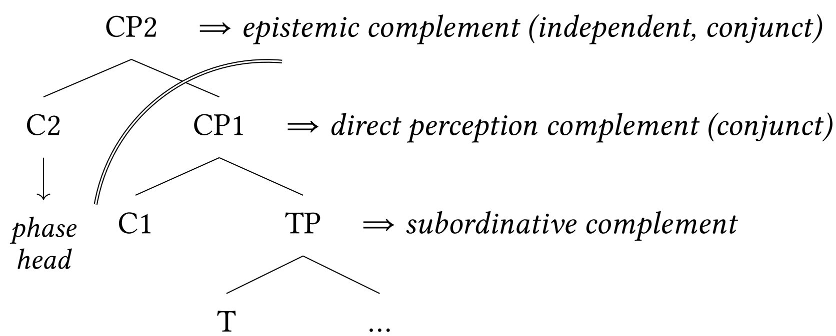
- **Unchanged conjunct**:
  1. conditional antecedents (conditional antecedents, *cika(w)* 'even if', *nopal* 'if only')

- **Subordinative**:
  1. CP-less clauses (situation and event complements, asymmetric coordination, clause chaining, polite imperatives)

2. (optionally) clause modified by temporal/modal adjunct clause (conditional consequents, clause modified by temporal adjunct)
3. "some temporal stuff" (*tane(hk)* 'since' clauses, *pihce* 'for a long time')

In Chapter 5 we zoomed in on how various Ā processes interact with clause type, focusing in particular on *wh* movement and long distance agreement. I showed how the complex patterns in this domain arise naturally from differences in clause size, with independent and epistemic conjunct clauses being large, phasal CPs, direct perception conjunct clauses being non-phasal CPs, and subordinative clauses being bare TPs, thus building an argument that different clause types systematically vary in terms of structural size:

(348)



Finally, in Chapter 6, I connected the results of the previous chapter to current work on clause size and clausal reduction in complementation and coordination in order to explain a large number of the distributional properties of different clause types outlined Chapter 4.

There are a number of loose threads and unanswered questions remaining. I outline some of them below, in the hopes that they will be address in future research:

- **How do we understand the uses of the independent, conjunct, and subordinative that aren't clearly linked to clause size?** One particularly pressing issue is the alternation between independent and conjunct with different *wh* questions, which I have no analysis of. Perhaps a solution may come from Richards's 2004 analysis of a similar alternation in Wampanoag, though the facts are slightly different in Passamaquoddy. Another potential path to a solution may come from work that links movement to clause size, such as Pesetsky (2021).

- **How exactly does the different behavior of central agreement between clause sizes come about?** As we've seen, central agreement shows different patterns between independent, conjunct, and subordinative clauses—in particular, between independent and subordinative on the one hand, which use discontinuous prefix + central suffix combinations, and conjunct on the other, which uses a purely suffixing paradigm. Can these differences be understood as derivative of a more basic clause size contrast?

- **Given that subordinative clauses are TPs, why do some (but not all) speakers seem to allow subordinative *wh* questions, at least in some contexts?** As I've shown, there are a number of reasons to think that subordinative clauses lack CP layers, such as the locality properties of subordinative LDA, the lack of peripheral agreement and its ramifications for Infl-C bleeding (Oxford 2015, 2017a, 2020a), the impossibility of *wh*-scope marking out of subordinative clauses, and so on. So how then are we to understand the possibility of certain kinds of (true) subordinative *wh* questions for some speakers?

- **Why exactly do different attitude predicates require clausal complements of different semantic types?** There is a clear correlation, as Wurmbrand and Lohninger (2023) point out, between the meaning of the attitude predicate and the kind of semantic objects it embeds (propositions, situations, events). But what are the deeper explanations for these correlations?

- **How exactly does TP coordination give us asymmetric readings?** We still lack a full compositional account of how coordinating two TPs (or two smaller clausal constituents, like VPs) results in asymmetric interpretations, though see Bjorkman (2012) for a tentative suggestion.

- **Why is there a difference between matrix and embedded coordination with respect to (a)symmetry and CP/TP coordination?** As we saw, matrix and embedded coordination allow for different "mismatches" between (a)symmetric interpretations and CP/TP coordination: matrix coordination allows TP coordination in symmetric contexts but bans CP coordination in asymmetric contexts, whereas embedded coordination bans TP coordination in symmetric contexts but allows CP coordination in asymmetric contexts (albeit a bit less naturally). Why?

I present these remains questions as challenges to spur on future work in this area.

Part II

C and agreement

Chapter 8

Introduction

This part of the thesis explores another aspect of Algonquian CP syntax: the peripheral suffix, primarily in the independent order. While the focus is broad and pan-Algonquian, in this introduction I'll illustrate some of the issues and questions that arise using Passamaquoddy. To set the scene, let's observe the following two puzzling facts about independent peripheral agreement in Passamaquoddy (throughout, I bold the peripheral suffix and underline what it agrees with):

- **It shows third person preference.** It will agree with third person arguments, and only third person arguments, no matter what syntactic role they have:

(349) a.

k-	sekpawol	-a	-wa	**-k**	2PL⟶ $\boxed{\textbf{3PL}}$
2-	scare$_{\text{TA}}$	3OBJ	-PL	**-PROX.PL**	

'y'all scared <u>them</u>'

b.

k-	sekpawol	-oku	-wa	**-k**	$\boxed{\textbf{3PL}}$ ⟶ 2PL
2-	scare$_{\text{TA}}$	-INV	-PL	**-PROX.PL**	

'<u>they</u> scared y'all'

As we can see, peripheral agreement will agree with the third person argument, no matter whether it's the subject or object (recall that the SAP inverse doesn't involve syntactic inversion, as shown in Section 2.4.3)—an omnivorous third person agreement pattern (to use Nevins's 2011 term). This is true of independent peripheral agreement all Algonquian languages. This pattern is extremely puzzling under the commonly assumed conclusion that third person is *featurally underspecified* relative to first and second, particularly in the syntax (Harley and Ritter 2002, Béjar 2003, Preminger 2019a, van Alem 2023, a.m.o.). If so, how should a probe be able to specifically target third persons without first or second person acting as an intervener?

- **It shows lowest preference.** When there are multiple accessible third person arguments for the peripheral suffix to potentially agree with, it'll agree with the *lowest one*—and, moreover, "lowest" is calculated *after* the step of A movement found in the third person inverse (see Section 2.4.3):

(350) a. ’- sekpawol -a -wa **-l** PROX.PL $\longrightarrow$ $\boxed{\textbf{OBV.SG}}$
3- scare_{TA} 3OBJ -PL **-OBV.SG**
‘$\text{they}_{\text{PROX}}$ scared <u>him/her</u>$_{\text{OBV}}$’

b. ’- sekpawol -oku -wa **-l** PROX.PL $\longleftarrow$ $\boxed{\textbf{OBV.SG}}$ $\longrightarrow$ *t*
3- scare_{TA} INV -PL **-OBV.SG**
‘$\text{they}_{\text{PROX}}$ were scared by <u>him/her</u>$_{\text{OBV}}$’

c. ’- sekpawotu -w -a -ni -ya **-l** PROX.PL $\longrightarrow$ OBV.SG/PL $\longrightarrow$ $\boxed{\textbf{OBV.SG}}$
3- scare_{TI} -APPL -3OBJ -N -PL **-OBV.SG**
‘$\text{they}_{\text{PROX}}$ scared <u>him/her</u>$_{\text{OBV}}$ for $\text{him/her/them}_{\text{OBV}}$’

The peripheral suffix will agree with the object of a direct 3⟶3 monotransitive (350a), the external argument of a third person inverse monotransitive (350b), which is the derived lowest argument, and the theme of a ditransitive (350c). Outside of Passamaquoddy, peripheral agreement demonstrates lowest-preference (in different variations) in several Algonquian languages, like Ojibwe and Wampanoag. (Some Algonquian languages, like Blackfoot, show straightforward locality effects, with the peripheral suffix agreeing with the highest third person.) Given that the Agree operation, under various formulations (e.g. Chomsky 2000, 2001, Béjar 2003, Béjar and Rezac 2009, Preminger 2014, Deal 2015a, 2022, a.m.o.), is designed to capture the general *locality* of agreement (and other syntactic phenomena, like movement), how can peripheral agreement be so strikingly *non*-local?

Third person preference and lowest preference seem like striking counterexamples to long-held beliefs in the generative literature on φ agreement—namely, the underspecification of third person and the locality of Agree. Does this data force us to throw these beliefs out?

As is evident, the correct analysis of Algonquian peripheral agreement has important ramifications for the theory of agreement. In order to address these issues and evaluate the challenges posed by peripheral agreement, this part of the thesis aims to provide an analysis of peripheral agreement that’s compatible with independent morphosyntactic properties of Algonquian and is also able to capture the variation we find across the family. There are thus two broad goals that I tackle: one is to analyze cross-Algonquian variation in peripheral agreement, and the other is to evaluate which long-standing beliefs about agreement need to be modified given (the right analysis of) this data.

I argue that third person underspecification cannot be upheld, but the locality of Agree can be. In Chapter 9, I show that Algonquian third person preference *must* be analyzed as a probe specified for third person, thus entailing that third person has its own distinct non-underspecified representation, contra the received wisdom (a conclusion in line with Nevins 2007, Trommer 2008, and Bondarenko 2020). There is no workable alternative analysis that tries to explain away this pattern—not by agreement for animacy, obviation, [D] features, the Activity Condition, or anything else.

In contrast, Chapter 10 shows that existing, independently-motivated mechanisms in the literature already predict the existence of Algonquian-type lowest preference patterns, and provides a novel morphological account of lowest preference that is able to preserve the locality of Agree, which I argue is still desirable. I bring together a key insight from the literature on Agree, which is that a single head can Agree with multiple goals (Hiraiwa 2001, 2005, Béjar 2003, Nevins 2007, 2011, Béjar and Rezac 2009, Deal 2015a, 2022, Coon and Keine 2021, a.m.o.), together with a key insight from the literature on case, which is that a nominal that has been assigned case multiple times can spell out only the *last* case assigned, leaving the rest unexponed (Béjar and Massam 1999, Merchant 2006, Pesetsky 2013, Alboiu and Hill 2016, Levin 2017, Richards 2017, a.o.), a morphological process we can call Expone Outermost. If we combine these two independently-motivated ideas, the result is a probe that has agreed with multiple arguments successive-cyclically, but then only expones the feature bundle it got last—giving us the surface appearance of agreeing with the least local accessible matching goal. I propose this is exactly what happens in Passamaquoddy and the other Algonquian languages like it. This approach allows us to preserve the well-motivated idea that Agree is generally subject to Minimality-based locality, as the surface appearance of nonlocality is essentially just a morphological illusion derived by Expone Outermost. A nice consequence of this is that we don't predict similar radically non-locality effects in the domain of movement (which robustly do not seem to exist), as movement is fundamentally a *syntactic*, rather than morphological process (in contrast to φ agreement, which has both syntactic and morphological components).

I extend this approach to the analysis of cross-Algonquian variation in peripheral agreement, building on the work of Xu (2021, 2022, 2023). We can note that Algonquian languages sort themselves into four broad categories depending on their peripheral agreement behavior:

1. Highest: C agrees with the highest third person.
   Languages: Arapaho, Blackfoot, Cree-Innu-Naskapi, Menominee, Meskwaki-Sauk-Kickapoo, Miami-Illinois
2. Lowest: C agrees with the lowest third person...
   (A) ...full stop.
   Languages: Cheyenne, Mi'gmaq, Passamaquoddy, Penobscot
   (B) ...but not themes of ditransitives.
   Languages: Ojibwe-Algonquin, Potawatomi, Shawnee
   (C) ...that is definite/specific. If all third persons are indefinite/nonspecific, C agrees with the highest argument.
   Languages: Delaware, Mahican, Wampanoag, Western Abenaki, Proto-Algonquian

We can capture the broad split between the Highest and Lowest languages by varying the specification of the peripheral agreement probe in C (on the peripheral suffix being in C, see Halle and Marantz 1993, Branigan and MacKenzie 1999, Bliss 2013, Oxford 2017a, Bondarenko 2020, Hammerly 2020, 2021, Xu 2022, a.o.): in the Highest languages, it simply Agrees with the closest third person, whereas in the Lowest languages, it Agrees with *all* third persons in its domain, and only expones the outermost features. To capture variation across the Lowest languages, I propose that they vary in terms of which arguments can move out of the VP phase, paralleling similar proposals about variation in object shift in Germanic (Holmberg 1986, Diesing 1992, 1996, Thráinsson 2001, a.m.o.) and variation in ergative patterning in Inuit (Woolford 2017, Yuan 2022): all objects shift in Lowest A languages, only the highest object shifts in Lowest B languages, and only definite/specific objects shift in Lowest C languages.

Throughout, I provide examples from Blackfoot, Passamaquoddy, Ojibwe, and Wampanoag[1] as exemplars of each peripheral agreement pattern we find in Algonquian. I will not provide citations for the Passamaquoddy verb forms I provide—they are constructed by me based on my own knowledge of the language and the paradigms in Sherwood (1986) and Francis and Leavitt (2008). The Wampanoag data, when it comes from primary texts—primarily the second edition of John Eliot's Wampanoag bible (Eliot 1685) as well as the texts written by native speakers collected in Goddard and Bragdon (1988)—will be presented in a four-line format: the original orthography on the first line in ⟨angle brackets⟩, a transcription into the current orthography used by the Wampanoag reclamation movement (fermino 2000) on the second line, followed by the gloss and translation. I modify Nichols's (1980) Southwestern Ojibwe transcriptions to the now more commonly used Fiero double-vowel system. For reference, I list the possible exponents of the peripheral suffix in the independent order in each of our sample languages in Tables 8.1–8.4.

	IN	AN.PROX	AN.OBV
SG	*-wa*	*-wa*	*-yini*
PL	*-yi*	*-yi*	*-yi*

Table 8.1: Blackfoot

	IN	AN.PROX	AN.OBV
SG	*-Ø*	*-Ø*	*-ol*
PL	*-ol*	*-ok*	*-`*

Table 8.2: Passamaquoddy

	IN	AN.PROX	AN.OBV
SG	*-Ø*	*-Ø*	*-an*
PL	*-an*	*-ag*	*-an*

Table 8.3: Ojibwe

	IN	AN.PROX	AN.OBV
SG	*-Ø*	*-Ø*	*-ah*
PL	*-ash*	*-ak*	*-ah*

Table 8.4: Wampanoag

For the formal analysis, I adopt (a variant of) Deal's (2015a, 2022) INTERACTION-SATISFACTION model of Agree, though this is mostly just for concreteness's sake—the insights of this part of the dissertation can easily be translated into any other model of Agree that allows for probe relativization and multiple agreement. Under this approach, a probe is specified for an INTERACTION CONDITION, [INT:], which specifies which features, when found on a goal, will cause the probe to copy features from that goal (i.e. "interact" with the goal), and a SATISFACTION CONDITION, [SAT:], which specifies which features, when found on a goal, will cause the probe to stop search. The one change I make to Deal's original algorithm is that for me, interaction with a goal causes the probe to copy *all* the features from that goal, rather than only those features specified by(/entailed by) the interaction condition (see also Hammerly 2020, 2021, Bondarenko and Zompì 2021, Joshi 2021). Thus, a probe specified [INT:PART] will copy *all* features from a [PART]-bearing goal, rather than just [PART] (and the features entailed by [PART], like [π] or [φ])—this would include things like number features, categorial features, indices (if indices are syntactically-represent features that are targetable by Agree; Rezac 2004, Clem 2022, Arregi and Hanink 2022b, a.o.), and whatever else is found on the goal. For more discussion, see Section 9.4.1.

[1]Wampanoag is known by many names—the most common alternative name is Massachusett. Here, I use Wampanoag, as it's the name used by the ongoing Wampanoag reclamation movement, following the reasoning laid out by Ash et al. (2001).

Chapter 9

Third person preference

This chapter has two main goals, one empirical and one theoretical. The empirical goal is to demonstrate that peripheral agreement across Algonquian displays third person preference, using our sample of Blackfoot, Passamaquoddy, Ojibwe, and Wampanoag. The theoretical goal is to argue that this data forces us to accept that third person features exist, even in the syntax, contra Preminger (2019a) and van Alem (2023).

We'll start with the theoretical background. I'll outline the debate about third person features as it currently exists in the literature, laying out the various analytic possibilities that have been presented and the theoretical stakes at hand. With our minds thus primed, we'll go through the behavior of peripheral agreement in our sample in scenarios with only one third person (which is representative of what happens with peripheral agreement throughout the family)—intransitives, 3⟶SAP, and SAP⟶3. The striking result is that peripheral agreement always tracks the third person argument, no matter where it is. Scenarios with more than one third person show variation across the family, and we will take a close look at them in Chapter 10.

The third person preference displayed by the peripheral suffix seems to suggest that we have to be able to relativize probes to specifically look only for third persons, forcing us to conclude that third person is specified in the syntax. I then argue that various alternatives—object movement, the Activity Condition, agreement for animacy, agreement for obviation, and agreement for the categorial feature [D]—all fail to capture this pattern. I finish by returning to the theoretical picture, discussing which kinds of theories of φ features are compatible with the Algonquian data, and what the theoretical and typological consequences of this result are.

9.1 Theoretical background

9.1.1 3noP vs. 3yesP

One crucial choice point for any theory of the representation of φ features is what to do with third person, which is a large point of variation in the literature. Inspired by Nevins (2007), we can distinguish between two families of views: 3noP and 3yesP:

(351) a. *3noP*

The representation of third person is underspecified relative to first and second person: third person lacks features that aren't present in first or second person.

b. *3yesP*

The representation of third person is not underspecified relative to first and second person: third person contains a feature not found in first person and a feature not found in second person.

To understand this division, let's look at a representative from each camp: Harley and Ritter (2002) on the 3noP side, and Nevins (2007) on the 3yesP side.

Harley and Ritter (2002), in line with a longstanding insight (see Forchheimer 1953 for discussion, a.m.o.), propose that third person is represented by a lack of person features. They argue for the following privative representations of the different person values:

(352) a. [ ]: third person — Harley and Ritter (2002)

b. [PART, ADDR]: second person

c. [PART, AUTH]: first person exclusive

d. [PART, AUTH, ADDR]: first person inclusive

In this system, the only person features are [PART], [AUTH],[1] and [ADDR], and third person lacks these features entirely. Since third person trivially does not contain any features that aren't also present in first or second person, this is a 3noP theory of person.

On the other side, Nevins (2007) proposes a theory of person features consisting of binary [±PART] and [±AUTH], alongside privative [ADDR] to capture first person inclusive in the languages that have it:

(353) a. [−PART, −AUTH]: third person — Nevins (2007)

b. [+PART, −AUTH]: second person

c. [+PART, +AUTH]: first person (exclusive)

d. [+PART, +AUTH, ADDR]: first person inclusive

In this system, third person contains a feature not found in either first or second person: [−PART]. In other words, [−PART] is a third person feature. The representation of third person here is not underspecified relative to first or second, so Nevins's (2007) system is a 3yesP theory of person.

It's worth outlining a few more theories of person features, to better get a sense of this 3noP–3yesP distinction. First, It's possible to be a 3noP theory even if third person is not completely underspecified. In a natural extension of Harley and Ritter's (2002) insights, Béjar (2003) proposes that the representation of all persons contains the privative feature [π] (for "person"):

(354) a. [π]: third person — Béjar (2003)

b. [π, PART, ADDR]: second person

c. [π, PART, AUTH]: first person exclusive

d. [π, PART, AUTH, ADDR]: first person inclusive

[1] Harley and Ritter (2002) use "Speaker", but I adopt the modality-neutral label AUTH, for "author".

Even though third person has a nontrivial feature specification—the feature [π]—this is still a 3noP theory because the representation of third person is wholly contained within the representation of the other persons. There is no feature that third person has but first or second lack.

Secondly, it's possible to have a 3yesP theory even if there's no unique third person feature, as long as third person is not underspecified relative to first and second. To see how, let's consider Harbour's (2016) representations of person:

(355) a. [−PART, −AUTH]: third person — Harbour (2016)

b. [+PART, −AUTH]: second person

c. [−PART, +AUTH]: first person exclusive

d. [+PART, +AUTH]: first person inclusive

Here, there is no uniquely-identifiable third person feature. The representation of third person shares a feature with second person, [−AUTH], as well as a different feature with first person exclusive, [−PART]. However, at the same time, third person isn't underspecified relative to the other persons—you can always find some point of difference. Third person differs from second person in the presence of [−PART], and it differs from both first persons in the presence of [−AUTH]. Thus, Harbour's (2016) theory is still a 3yesP theory.

You may have noted that in all the cases discussed so far, 3noP has been represented by theories with privative features, whereas 3yesP has been represented by theories with binary features. However, this is not a logical necessity. While it might make more sense for a 3noP theory to use privative features, there's no reason why a 3yesP theory would need to employ binary features—and indeed, people have proposed privative 3yesP representations. For instance, Bondarenko's (2020) feature geometry produces the following representations of person (abstracting away from the proximate–obviative contrast):

(356) a. [π, 3]: third person — Bondarenko (2020)

b. [π, PART, ADDR]: second person

c. [π, PART, AUTH]: first person exclusive

d. [π, PART, AUTH, ADDR]: first person inclusive

Here, since the privative third person feature [3] is not found in first or second person, this is a 3yesP theory, despite using privative features.

9.1.2 What would help us decide?

So: there's a distinction to be made between 3noP and 3yesP theories of person, which is orthogonal to the issue of privative versus binary representations. Moving now from the purely theoretical domain to the empirical domain, we need to ask ourselves the following question: what kinds of data would help us decide between 3noP versus 3yesP?

Under a 3noP theory, there's no way to write any kind of rule or process that specifically targets only third person, as the featural specification of third person is contained within the specification of first and second. In contrast, in a 3yesP theory, it's trivial to find a way to refer directly to third person and only third person. Thus, the question of whether to adopt 3noP or

3yesP reduces to the following empirical question: are there any morphosyntactic phenomena that can be demonstrated to be sensitive specifically to third person and third person only, to the exclusion of first and second?

The answer to this empirical question seems to be yes, at least for the case of morphological phenomena. There are a number of morphological processes that seem to be sensitive specifically to third person. A classic case of this, as pointed out by Nevins (2007), is the existence of 3-on-3 dissimilation effects. Abstractly, this phenomenon involves the ungrammaticality of two linearly-adjacent third person markers (typically clitics), which is repaired by removing the person specification of one of the offending clitics, resulting in an underspecified form. There are two important properties of 3-on-3 dissimilation effects: *(i)* the conditioning environment for this kind of rule, adjacency to the third person marker, requires reference to third person features; and *(ii)* the target of the rule, a third person clitic, also requires reference to third person features. This is necessary in order to avoid overapplication of the dissimilation rule in SAP⟶3 or 3⟶SAP contexts.

To see an example of this kind of process in action, let's take a look at the case of Ubykh (Northwest Caucasian), as discussed by Deal (2020).[2] In Ubykh, the third person absolutive clitic *ɐ=* cannot linearly precede a third person singular clitic—instead, you either drop the absolutive clitic (which is independently possible—absolutive clitics are optional), or you realize it as the otherwise unattested form *jɨ=*:

(357) a. ***ɐ́=** Ø= n= tʷɨ -n
3ABS= 3SG.DAT= 3SG.ERG= give -PRS
Intended: '[She] gives it to her.'

b. Ø= n= tʷɨ -n
3SG.DAT= 3SG.ERG= give -PRS
'She gives (it) to her.'

c. **jɨ́=** Ø= n= tʷɨ -n
ABS= 3SG.DAT= 3SG.ERG= give -PRS
'She gives it to her.' Ubykh (Deal 2020: 18–19, 21)

Deal (2020) argues that the 3-on-3 ban in Ubykh must be a surface morphological restriction, rather than a syntactic one, noting that it appears only when third person *ɐ=* is linearly adjacent to another third person singular clitic—the case or syntactic role of the other offending clitic does not matter. If a non-third-person clitic intervenes between two third person clitics, then there

[2] The main example discussed by Nevins (2007) is the "spurious *se*" rule in Spanish (Romance), where the third person dative clitic *le(s)* becomes the "reflexive" clitic *se* in the context of an immediately following third person clitic. I'm not presenting this classic example here, as it's unclear whether spurious *se* really is morphological in nature. Alcaraz (2018) shows that there are several *syntactic* differences between spurious *se* and dative *le(s)*, an observation that poses a significant challenge to any purely morphological dissimilatory accounts of the phenomenon. I refer to the interested reader to Fábregas and Cabré (2021), who acknowledge Alcaraz's challenge and propose a syntactic account of spurious *se*. Looking further afield from Spanish and Ubykh, similar kinds of 3-on-3 restrictions can be found in other varieties of Romance (Bonet 1995; Pescarini 2010; a.o.), as well as in Arabic (Semitic, Walkow 2012), Kambera (Malayo-Polynesian, Klamer 1997), and Caquinte (Arawakan, Drummond and O'Hagan 2020). However, many of these cases involve repairs other than dissimilation for the offending 3-on-3 configuration.

is no issue: *ɐ=* is happy to surface, and will not be replaced by *jɨ=*. Deal (2020) then goes on to propose that *jɨ=* is the default, personless exponent of an absolutive clitic, resulting from deleting the third person features of *ɐ=* in the offending environment.

Here's another argument to this effect, this time from Algonquian. The logic of this argument goes as follows: third person features can be the context for contextual allomorphy, and if third person were really just a subset of first and second person, then it wouldn't be possible to specify a contextual allomorph to appear just in the context of third person without also happening to include first and second person as well. To illustrate this argument, let's take a look at SAP⟶3 portmanteaux in the conjunct mode in Meskwaki, which I will assume are derived by (nonlocal) contextual allomorphy, following Grishin and Oxford (2023). To illustrate, let's compare the following conjunct interrogative forms:

(358) Meskwaki 1SG⟶2SG and 1SG⟶3 conjunct interrogative (Goddard 1994a: 206–207)

a. | wâpam | -en | -ow | **-ân** | -êni | 1SG⟶2SG
---|---|---|---|---|---
see$_{\text{TA}}$ | -2OBJ | -INT | **-1SG.CJ** | -INT |

'I must have seen you'

b. | wâpam | -â | -w | **-ak** | -êni | 1SG⟶3
---|---|---|---|---|---
see$_{\text{TA}}$ | -3OBJ | -INT | **-1SG:3CJ** | -INT |

'I must have seen her/them'

In the 1SG⟶2SG form (358a), we have a simple central suffix *-ân* indexing the first person singular external argument. In contrast, in the 1SG⟶3 form, we find a portmanteau *-ak* marking a first singular external argument and a third person internal argument.

In the abstract, then, we need to have the following two VI rules:

(359) a. Infl[1SG] ↔ *-ak* / Voice[3] (...) __

b. Infl[1SG] ↔ *-ân*

We need Infl to be able to see third person features on Voice to trigger the insertion of the allomorph *-ak* (across the morpheme *-w* that appears in the interrogative mode of the conjunct), and we need second person features on Voice to result in the default first singular allomorph *-ân*.

However, if third person features were truly underspecified—for instance, simply [π]—then the VI rule for *-ak* would have to be the following:

(360) A bad rule for *-ak*!

Infl[1SG] ↔ *-ak* / Voice[π] (...) __

But the problem with this rule is that it would be triggered *whenever* Voice has collected any kind of person features—whether they're third person, second person, or first person. So this rule would predict that we should also get *-ak* in the 1SG⟶2SG form, which is an incorrect prediction, as demonstrated by (358b). There is no way to get out of this problem unless third person has a feature that first and second lack—in other words, if 3yesP is true. So, third person is not underspecified.

This seems like exactly the kind of data point that should push us away from 3noP in favor of 3yesP. However, there's an issue: as Preminger (2019a) and van Alem (2023) point out, all the examples in the literature that argue for 3yesP—and there are several—involve *morphological* processes. Thus, there's an interesting intermediate position one can stake out between 3noP and 3yesP: namely, that 3noP holds *in the syntax*, whereas 3yesP holds *in the morphology*. Under this view, third person is underspecified specifically in the narrow syntax, and thus no narrow syntactic process can target all and only third person. However, at the morphological component of the grammar, we convert underspecified syntactic representations into more specified morphological representations, allowing for third person to be visible to morphological processes. Preminger (2019a) proposes and van Alem (2023) extensively defends the following implementation of this idea, which takes inspiration from phonological redundancy rules that insert predictable featural information into underspecified phonological representations (Archangeli 1984, 1988, a.o.): the narrow syntax operates on privative 3noP representations, and the morphology converts those privative representations into binary 3yesP representations with the following redundancy rules:

(361) a. $[\textsc{part}]_{\text{SYN}} \Rightarrow [+\textsc{part}]_{\text{MORPH}}$

b. $\neg\exists[\textsc{part}]_{\text{SYN}} \Rightarrow [-\textsc{part}]_{\text{MORPH}}$

This successfully captures the intuition the 3noP holds in the syntax but not the morphology. We can call this more nuanced view SYNTACTIC 3NOP.

What would it take to decide between syntactic 3noP and 3yesP? We'd need to broaden our search horizon to *syntactic* processes that might be sensitive to third person. One such syntactic process to investigate is φ agreement[3]—in particular, we're interested in the phenomenon of OMNIVOROUS AGREEMENT (Nevins 2011), where an agreement marker is specifically looking for a particular feature, like [PART] or [PL], no matter whether it's on the subject or object (or elsewhere). For instance, Chimariko (isolate, California) features omnivorous [PART] agreement, where the person agreement prefix agrees with first and second person DPs, no matter if they're the subject or object:

(362) Omnivorous [PART]

a. **Qʰ**-uk'o-ˀna-n.
2PL-talk-APPL-ASP
'Y'all talked to him.'

b. **Qʰa**-k'o-ˀna-n.
2PL.PAT-talk-APPL-ASP
'He talked to y'all.' Chimariko (Jany 2009:146)

Similarly, but in the domain of number, Panará (Jê, Brazil) has a dual clitic *mẽ=* which agrees omnivorously with dual DPs, no matter if they're the subject or object:

(363) Omnivorous [DU]

a. Ka-rân ka= **mẽ=** r= anpun inkjẽ.
2SG-PL.ERG 2ERG= **DU=** 1SG.ABS= see 1SG
'You two saw me.'

[3]Bobaljik (2008) proposes that agreement is postsyntactic; see Arregi and Nevins (2012) and Preminger (2014) for responses reaffirming that (at least one component of) agreement really is narrow-syntactic.

b. Ka hẽ ka= **mẽ=** r= anpun <u>inkjẽ-ra</u>.
2SG ERG 2ERG= **DU=** 1SG.ABS= see <u>1SG-DU</u>
'You saw <u>us two</u>.' Panará (Bardagil 2020:316)

A classic analysis of this kind of pattern within a Probe-Goal model of agreement (Chomsky 2000; 2001, a.m.o.) is to take advantage of the idea that probing is *relativized*, an idea extensively explored by Béjar (2003) and much further work. A probe is specified to look for particular kinds of features—most standardly, for instance, features like [*wh*] and [φ], in the case of *wh* movement or simple subject/object φ agreement. In order to capture cases of omnivorous agreement for a more specific feature, like the examples of [PART] and [DU] agreeement in Chimariko and Panará, we can simply relativize the relevant probe to a more specific feature like [PART] or [DU]. In a very real sense, in this kind of probe-goal model, *all* agreement is omnivorous: [*wh*] probes skip over non-*wh*-items, and [φ] probes skip over potential goals that don't bear φ features.

Thus, in the domain of agreement, the kind of data we'd be looking for is an example of omnivorous third person: a probe that is specified for some kind of third person feature, whether it's [3], [−PART], or [−PART, −AUTH] (depending on your preferred representation of person features). Omnivorous third person is strikingly hard to find, as Preminger (2019a) and van Alem (2023) point out.[4] Moreoever, they argue that omnivorous third person does not exist, and that this is a principled typological gap.[5]

With the theoretical backdrop thus set and the empirical stakes laid out on the table, this goal of this chapter is to argue that the third person preference displayed by the Algonquian peripheral suffix is a genuine instance of omnivorous third person agreement that must be analyzed as a probe specified for third person. Thus, there exist genuine examples of syntactic processes sensitive to third person—syntactic 3noP cannot be upheld.[6]

9.2 The data

Now we can turn to examining the behavior of the peripheral suffix in our sample of Blackfoot, Ojibwe, Passamaquoddy, and Wampanoag. I'll focus on scenarios with only one third person—the

[4]The closest thing to omnivorous third person that Preminger (2019a) and van Alem (2023) mention is the behavior of the Menominee "formative" suffix (to use Goddard's (2007) terminology), as discussed by Trommer (2008). Roughly, there's a slot in the verbal inflectional template that hosts either *-w*, *-m*, or *-n*, and in the simplest cases *-w* appears whenever there's a clausemate third person argument. This isn't the cleanest example though, as Preminger (2019a) and van Alem (2023) observe, due to a number of complications. As Trommer (2008) discusses in detail, *-w* does not appear in every context containing a third person argument—notably, you don't get *-w* in (most) negative verb forms, PART→IN scenarios, and in IN→IN scenarios. Thus, it's strikingly difficult to state the generalization in terms of omnivorous third person. For this reason, Trommer (2008) actually argues for a *morphological*, OT-based account of the formative slot, appealing to third person features in the morphology. In the end, then, the Menominee formative suffix isn't a clear counterexample to Preminger (2019a) and van Alem's (2023) proposed typological gap.

[5]Additionally, van Alem (2023) argues that the attested inventory of PCC effects also supports syntactic 3noP: I address this argument briefly in Section 9.4.3

[6]A similar kind of argument can be adduced from Bondarenko's (2020) proposal that the Passamaquoddy theme sign is specified for third person (at least in the independent order). Her goal is to capture the distribution of inverse marking in the independent. However, there are numberous other plausible alternative analyses of inverse marking out there that don't require direct reference to third person (Bruening 2001b, Oxford 2019b, Hammerly 2020, a.o.), so the argument from the theme sign isn't conclusive.

interaction of multiple third persons will be addressed in Chapter 10. The empirical conclusion will be that, no matter whether the third person is the subject or object, the peripheral suffix will agree with it. This is exactly the behavior we expect from a case of omnivorous third person agreement.

Throughout, I will use first person exclusive as the exemplar of an SAP argument—other first or second person specifications behave similarly. I also default to 'she' as the translation for third person singular, but it should be kept in mind that there is no grammatical masculine/feminine gender distinction made in Algonquian. I bold the peripheral suffix and underline the argument it indexes in the translation.

9.2.1 Intransitives

In intransitives, we can see that if the subject is an SAP, then we do not get a peripheral suffix. In contrast, if the subject is a third person, then the peripheral suffix appears and covaries with the number, animacy, and obviation of the third person subject.

(364) Blackfoot (Frantz 2017: 170)

a. nit-á'po'taki-hpinnaan
1-work$_{\text{AI}}$-1EXC
'we$_{\text{EXC}}$ work'

b. á'po'taki-**yi**
work$_{\text{AI}}$-**PL**
'<u>they</u> work'

c. á'po'taki-**yini**
work$_{\text{AI}}$-**OBV.SG**
'<u>she</u>$_{\text{OBV}}$ works'

d. soká'pii-**yi**
be.good$_{\text{II}}$-**PL**
'<u>they</u>$_{\text{IN}}$ are good'

(365) Southwestern Ojibwe (Nichols 1980: 273, 276)

a. ni-maajaa-min
1-leave$_{\text{AI}}$-1PL
'we$_{\text{EXC}}$ leave'

b. maajaa-w-**ag**
leave$_{\text{AI}}$-3-**PROX.PL**
'<u>they</u>$_{\text{PROX}}$ leave'

c. maajaa-w-**an**
leave$_{\text{AI}}$-3-**OBV**
'<u>she/they</u>$_{\text{OBV}}$ leave'

d. michaa-w-**an**
be.big$_{\text{II}}$-3-**IN.PL**
'<u>they</u>$_{\text{IN}}$ are big'

(366) Passamaquoddy

a. n-mewiyawi-pon
1-feel.better$_{\text{AI}}$-1PL
'we$_{\text{EXC}}$ feel better'

b. mewiyawi-w-**ok**
feel.better$_{\text{AI}}$-3-**PROX.PL**
'<u>they</u>$_{\text{PROX}}$ feel better'

c. mewiyawi-w-**ol**
feel.better$_{\text{AI}}$-3-**OBV.SG**
'<u>she</u>$_{\text{OBV}}$ feels better'

d. kisacuwi-w-**ol**
be.ready-3-**IN.PL**
'<u>they</u>$_{\text{IN}}$ are ready'

(367) Wampanoag (fermino 2000: 30, 36)

a. nu-qaqee-mun
1-run$_{AI}$-1PL
'we$_{EXC}$ run'

b. qaqee-w-**ak**
run$_{AI}$-3-**PROX.PL**
'they$_{PROX}$ run'

c. qaqee-w-**ah**
run$_{AI}$-3-**OBV**
'she/they$_{OBV}$ run'

d. ahtâ-w-**ash**
be.there$_{II}$-3-**IN.PL**
'they$_{IN}$ are there'

In the (a) examples, we have an SAP subject, and there is no peripheral agreement (though there is central agreement). In contrast, in (b-d), we see peripheral agreement tracking different kinds of subjects: proximate plurals, obviatives, and inanimate plurals.

9.2.2 3→SAP

In scenarios with a third person acting on an SAP, the peripheral suffix tracks the features of the third person external argument, both in the case of animate third person external arguments as well as inanimate external arguments:

(368) Blackfoot (Frantz 2017: 61)

a. nits-ikákomimm-ok-innaan-**a**
1-love$_{TA}$-INV-1EXC-**SG**
'she loves us$_{EXC}$'

b. nits-ikákomimm-ok-innaan-**i**
1-love$_{TA}$-INV-1EXC-**PL**
'they love us$_{EXC}$'

(369) Southwestern Ojibwe (Nichols 1980: 292)

a. ni-waabam-igo-naan-**Ø**
1-see$_{TA}$-INV-1PL-**PROX.SG**
'she$_{PROX}$ sees us$_{EXC}$'

b. ni-waabam-igo-naani-**g**
1-see$_{TA}$-INV-1PL-**PROX.PL**
'they$_{PROX}$ see us$_{EXC}$'

(370) Passamaquoddy

a. nt-ewepehl-oku-n-**Ø**
1-lift$_{TA}$-INV-1PL-**PROX.SG**
'she$_{PROX}$ lifts us$_{EXC}$'

b. nt-ewepehl-oku-nnu-**k**
1-lift$_{TA}$-INV-1PL-**PROX.PL**
'they$_{PROX}$ lift us$_{EXC}$'

c. nt-ewepehl-oku-ne-n-**Ø**
1-lift$_{TA}$-INV-N-1PL-**IN.SG**
'it lifts us$_{EXC}$'

d. nt-ewepehl-oku-ne-nnu-**l**
1-lift$_{TA}$-INV-N-1PL-**IN.PL**
'they$_{IN}$ lift us$_{EXC}$'

(371) Wampanoag (fermino 2000: 58, 61)

a. nu-p8n-uq-un-**Ø**
1-put$_{TA}$-INV-1PL-**PROX.SG**
'she$_{PROX}$ puts us$_{EXC}$'

b. nu-p8n-uq-unôn-**ak**
1-put$_{TA}$-INV-1PL-**PROX.PL**
'they$_{PROX}$ put us$_{EXC}$'

c. nu-wachôn-uq-unâ-n-**Ø**
1-keep$_{TA}$-INV-N-1PL-**IN.SG**
'it keeps us$_{EXC}$'

d. nu-wachôn-uq-unâ-nôn-**ash**
1-keep$_{TA}$-INV-N-1PL-**IN.PL**
'they$_{IN}$ keep us$_{EXC}$'

In the left column we find singular external arguments, and in the right column we find plurals—the peripheral suffix varies accordingly. Note that I do not provide forms for inanimate external arguments in Blackfoot because Blackfoot bans them entirely—external arguments in Blackfoot must be sentient, capable of exerting agency (Johansson 2008, Ritter and Rosen 2010, Frantz 2017).

A note on Ojibwe inanimate actor forms

Though Ojibwe does have forms for inanimate external arguments, I have not included them above. This is because, for the non-tense-marked verb forms we're examining here, IN⟶SAP.PL scenarios lack peripheral agreement entirely in Southwestern Ojibwe, something that's not true for some other varieties of Ojibwe, like Odawa:

(372) Southwestern Ojibwe (Nichols 1980: 292)

a. nim-bakite'-ogo-min
1-hit$_{\text{TA}}$-INV-1p
'it/they$_{\text{IN}}$ hit(s) us$_{\text{EXC}}$'

(373) Odawa (Rhodes 1976: 147-148)

a. n-biska-ag-naa-**Ø**
1-hit$_{\text{TA}}$-INV-1PL-**IN.SG**
'it hits us$_{\text{EXC}}$'

b. n-biska-ag-naani-**n**
1-hit$_{\text{TA}}$-INV-1PL-**IN.PL**
'they$_{\text{IN}}$ hits us$_{\text{EXC}}$'

Here, the lack of peripheral agreement in the Southwestern Ojibwe form means that it is ambiguous between singular and plural external arguments. Odawa is not similarly ambiguous.

Notably, this is not the case in IN⟶SAP.SG scenarios:

(374) Southwestern Ojibwe (Nichols 1980: 292)

a. nim-bakite'-ogo-n-**Ø**
1-hit$_{\text{TA}}$-INV-N-**IN.SG**
'it hits me'

b. nim-bakite'-ogo-n-**an**
1-hit$_{\text{TA}}$-INV-N-**IN.PL**
'they$_{\text{IN}}$ hit me'

Here, the peripheral suffix surfaces happily, and it tracks the features of the inanimate external argument.

Additionally, if a tense/modal marker intervenes between the central suffix and peripheral suffix, then peripheral agreement pops back up again in IN⟶SAP.PL scenarios. We can see this reappearance of peripheral suffixes in preterit and dubitative forms, for instance:

(375) Southwestern Ojibwe (Nichols 1980: 293-294)

a. nim-bakite'-ogo-minaa-$\boxed{\text{ban}}$-**Ø**
1-hit$_{\text{TA}}$-INV-1PL-$\boxed{\text{PRET}}$-**IN.SG**
'it hit us$_{\text{EXC}}$'

b. nim-bakite'-ogo-minaa-$\boxed{\text{ban}}$-**en**
1-hit$_{\text{TA}}$-INV-1PL-$\boxed{\text{PRET}}$-**IN.SG**
'they$_{\text{IN}}$ hit us$_{\text{EXC}}$'

c. nim-bakite'-ogo-minaa-$\boxed{\text{dog}}$-**Ø**
1-hit$_{\text{TA}}$-INV-1PL-$\boxed{\text{DUB}}$-**IN.SG**
'it must have hit us$_{\text{EXC}}$'

d. nim-bakite'-ogo-minaa-$\boxed{\text{dogen}}$-**an**
1-hit$_{\text{TA}}$-INV-1PL-$\boxed{\text{DUB}}$-**IN.SG**
'they$_{\text{IN}}$ must have hit us$_{\text{EXC}}$'

Thus, it does seem to generally be the case that the peripheral suffix agrees with inanimate external arguments in IN→SAP.PL scenarios.

I take the disappearance of the peripheral suffix in the basic IN→SAP.PL forms to be a surface morphological fact, one that is not indicative of the underlying syntax of agreement. Following similar proposals by Halle and Marantz (1993) and Xu (2022) for Potawatomi and Menominee, respectively, I propose that this is due to an idiosyncratic Impoverishment rule in Southwestern Ojibwe (but not Odawa) that deletes inanimate plural features on C in the context of immediately preceding SAP.PL features on Infl. This rule must be sensitive to surface linear locality, as it is bled by overt intervening material, like preterit *-ban* and dubitative *-dog(en)*. We'll see further instances of this same rule in SAP.PL→3 scenarios below.

A note on the absolute-objective contrast

At this point, we should discuss the ABSOLUTE-OBJECTIVE contrast found with transitive (but not intransitive!) verbs in certain Eastern Algonquian languages—Wampanoag, Delaware, Mahican, and Western Abenaki—and which can be reconstructed back to Proto-Algonquian (Goddard 1967, 1974, 1979a, 2007, Pentland 1999, Oxford 2014).[7] Here's one way to think of absolute and objective verbs: objective verbs are those where the peripheral suffix indexes the lowest third person, and absolute verbs are those where the peripheral suffix *doesn't* index the lowest third person.[8] In the languages that preserve a contrast between absolute and objective (most languages either regularized all forms to objective or mixed-and-matched the two), their distribution is determined by the definiteness/specificity of third person arguments: you choose an objective form if the lowest third person is definite/specific, otherwise you choose an absolute form. The exact details of the semantics involved seem to depend on the language—for instance, in Wampanoag, it seems that the nominals reliably treated as "specific" are pronouns, demonstrastives, topics, and proper names (Richards 2004: 346), whereas in Delaware it seems to be more about definiteness (Goddard 1979b: 157, Goddard 2021: 61). Thus, the absolute-objective distinction is a kind of differential argument marking sensitive to some language-specific kind of definiteness/specificity.

As an illustration, compare the following Western Abenaki PROX.SG→OBV forms in (376). The top line contains the original orthography from Laurent (1884), and the second line is my own phonemicization; *č* represents a phoneme that was intermediate between /ts/ and /tʃ/ (Laurent 1884: 10).

(376) a. ⟨Ôda 'wajônawi namasa.⟩ — Absolute
Ãta wačãn-a-wi-Ø-**Ø** namahs-a.
NEG have$_{TA}$-3OBJ-NEG-3-**PROX.SG** fish-OBV
'He$_{PROX}$ has no fish$_{OBV}$.'

b. ⟨Ôda w'wajônôwia asessa.⟩ — Objective
Ãta wə-wačãn-ã-wi-**a** ahsəss-a.
NEG 3-have$_{TA}$-3OBJ-NEG-**OBV** horse-OBV
'He$_{PROX}$ has not the horse$_{OBV}$.' — Western Abenaki (Laurent 1884: 146, 149)

[7] Though see Proulx (1982, 1984, 1990) for an alternative view where absolute verb inflection is reconstructed back to Proto-Algonquian, but objective verb inflection only developed later, as the individual Algonquian languages were splitting apart from Proto-Algonquian.

[8] Verb forms for scenarios without any third persons aren't considered to be absolute or objective.

In (376a), we have an absolute verb form: the (null) peripheral suffix is agreeing with the proximate external argument, rather than the obviative internal argument *namahsa* 'fish-OBV', as *namahsa* is indefinite. In contrast, we have an objective verb form in (376b), and here the peripheral suffix *is* in fact able to agree with the internal argument *ahsəssa* 'horse-OBV', as it is definite.[9]

Now back to 3⟶SAP scenarios. In the languages that preserve the Proto-Algonquian absolute-objective contrast, we find an absolute-objective contrast in IN⟶SAP scenarios, with objective verb forms indicating a definite/specific inanimate external argument, and absolute verb forms indicating an indefinite/nonspecific inanimate external argument. Compare the objective IN⟶SAP Wampanoag forms in (377) to the absolute IN⟶SAP form in (378):

(377) Wampanoag (fermino 2000: 61)

a. nu-wachôn-uq-unâ-n-**Ø**
1-keep$_{TA}$-INV-N-1PL-**IN.SG**
'<u>it</u> keeps us$_{EXC}$' (objective)

b. nu-wachôn-uq-unâ-nôn-**ash**
1-keep$_{TA}$-INV-N-1PL-**IN.PL**
'<u>they$_{IN}$</u> keep us$_{EXC}$' (objective)

(378) Wampanoag (fermino 2000: 59)
nu-wachôn-uk-umun
1-keep$_{TA}$-INV-1PL
'something, some things keep(s) us$_{EXC}$' (absolute)

In the objective forms (377), which we've seen above, C varies with the number of the specific inanimate external argument. In the absolute form (378), in contrast, the nonspecific external argument cannot be targeted by C, and thus the form is ambiguous for the number of the external argument (we also don't see the N formative *-unâ*).

Interestingly, the absolute-objective contrast for 3AN⟶SAP scenarios is much more restricted. In Delaware, there were simply no 3AN⟶SAP absolute forms (Goddard 1979b: 174, 2021: 61), and Goddard does not reconstruct 3AN⟶SAP absolute forms back to Proto-Algonquian (Goddard 1967: 83, 2007: 267). But in Wampanoag, there *are* 3AN⟶SAP absolute forms, just with a much more restricted distribution than normal: they only appear with indefinite external arguments that do not assert or propose the existence of a referent (Richards 2004: 359–362), commonly found with indefinites scoping under negation or with aggressively non-D-linked *wh* phrases:

(379) a. ⟨…wanne **kuttapehtunk8mw8** pomantam8onk.⟩
wânee **kut-apeehtô-k-8-muw** pumôtamuwôk.
not.any **2-be.in$_{TA}$-INV-NEG-2PL** life
'…ye have no life in you.' Wampanoag (Richards 2004: 360)

[9] There are other differences between these forms besides the behavior of the peripheral suffix. In (376a), Infl is realized as a simple (null) suffix *-Ø*, which has the effect of causing the third person theme sign *-ã* to change quality to *-a*. In contrast, in (376b), we see the third person prefix *wə-*. In Section 9.3.2, I discuss this phenomenon in more detail, summarizing and justifying Oxford's (2015, 2017a, 2020a) proposal that this umlauting suffix *-Ø* (from Proto-Algonquian umlauting **-ẅ*) is the default spellout of Infl, triggered by a dissimilatory Impoverishment rule that deletes the φ features on Infl when Infl and C have agreed with the same goal (just like what happens with the the inverse). In the absolute, both Infl and C agree with the external argument, thus triggering Impoverishment of Infl, resulting in the spellout of default *-Ø* rather than third person *wə-*.

b. ⟨Howan **kenogkumun**? kah howan **k8wahikumun**?⟩
Hawân **ku-nâ-k-umun**? kah hawân **ku-wâuhe-uk-umun**?
who **2-see$_{TA}$-INV-1PL** and who **2-know$_{TA}$-INV-1PL**
'Who seeth us? and who knoweth us?'
Wampanoag (Goddard and Bragdon 1988: 519)

These forms are exactly the same as the IN⟶SAP absolute forms, simply lacking a peripheral suffix entirely.

I leave a fuller analysis of the absolute-objective contrast to Chapter 10—for now, it suffices to note that C in languages like Wampanoag is sensitive to definiteness/specificity, and the generalization about C agreeing with the external argument in 3⟶SAP scenarios is relevant only for those third persons that could in principle have stood a chance at being agreed with (e.g. the definite/specific ones, in cases of an absolute-objective contrast).

With all that said, the cross-Algonquian picture of peripheral agreement in 3⟶SAP scenarios is clear: once we deal with some surface morphological details as well as some details about the absolute-objective contrast, the peripheral suffix consistently agrees with the third person external argument. So far, the agreement behavior of the peripheral suffix has been entirely local, and would thus be amenable to an analysis without third person features in the syntax. All of this will change in the next section.

9.2.3 SAP⟶3

Now we turn to SAP⟶3 scenarios. Here, strikingly, the peripheral suffix indexes the third person internal argument, skipping over the SAP external argument.

(380) Blackfoot (Frantz 2017: 46–47, 56–57)

a. nits-ikákomimm-a-nnaan-**a**
1-love$_{TA}$-3OBJ-1EXC-**SG**
'we$_{EXC}$ love her'

b. nits-ikákomimm-a-nnaan-**i**
1-love$_{TA}$-3OBJ-1EXC-**PL**
'we$_{EXC}$ love them'

c. nits-ííkoon-ii-hpinnaan-**a**
1-take.down$_{TI}$-IN.OBJ-1EXC-**SG**
'we$_{EXC}$ took it down'

d. nits-ííkoon-ii-hpinnaan-**i**
1-take.down$_{TI}$-IN.OBJ-1EXC-**PL**
'we$_{EXC}$ took them$_{IN}$ down'

(381) Southwestern Ojibwe (Nichols 1980: 289)

a. ni-waabam-aa-naan-**Ø**
1-see$_{TA}$-3OBJ-1PL-**PROX.SG**
'we$_{EXC}$ see her$_{PROX}$'

b. ni-waabam-aa-naani-**g**
1-see$_{TA}$-3OBJ-1PL-**PROX.PL**
'we$_{EXC}$ see them$_{PROX}$'

(382) Passamaquoddy

a. nt-ewepehl-a-n-**Ø**
1-lift$_{TA}$-3OBJ-1PL-**PROX.SG**
'we$_{EXC}$ lift her$_{PROX}$'

b. nt-ewepehl-a-nnu-**k**
1-lift$_{TA}$-3OBJ-1PL-**PROX.PL**
'we$_{EXC}$ lift them$_{PROX}$'

c. nt-ewepehtu-ne-n-**Ø**
1-lift$_{\text{TI}}$-N-1PL-**IN.SG**
'we$_{\text{EXC}}$ lift it'

d. nt-ewepehtu-ne-nnu-**l**
1-lift$_{\text{TI}}$-N-1PL-**IN.PL**
'we$_{\text{EXC}}$ lift them$_{\text{IN}}$'

(383) Wampanoag (objective forms) (fermino 2000: 43, 56)

a. nu-nâw-ô-wun-**Ø**
1-see$_{\text{TA}}$-3OBJ-1PL-**PROX.SG**
'we$_{\text{EXC}}$ see her$_{\text{PROX}}$'

b. nu-nâw-ô-wunôn-**ak**
1-see$_{\text{TA}}$-3OBJ-1PL-**PROX.PL**
'we$_{\text{EXC}}$ see them$_{\text{PROX}}$'

c. nu-putakuhum-unâ-n-**Ø**
1-hide$_{\text{TI}}$-N-1PL-**IN.SG**
'we$_{\text{EXC}}$ hide it'

d. nu-putakuhum-unâ-nôn-**ash**
1-hide$_{\text{TI}}$-N-1PL-**IN.PL**
'we$_{\text{EXC}}$ hide them$_{\text{IN}}$'

In the left column we find singular internal arguments, and in the right column we find plural internal arguments—the peripheral suffix changes accordingly.

A note on Ojibwe inanimate objects

Parallel to the previous section, I've left out SAP.PL⟶IN forms for Southwestern Ojibwe. These lack peripheral suffixes as well (384), and we find all the same behaviors as the corresponding IN⟶SAP forms we discussed in Section 9.2.2: Southwestern Ojibwe preserves peripheral suffixes in SAP.SG⟶IN scenarios (385), as well as whenever there's an intervening tense/modal marker (386).

(384) Southwestern Ojibwe (Nichols 1980: 283)

a. ni-wanit-oo-min
1-lose$_{\text{TI}}$-IN.OBJ-1PL
'we$_{\text{EXC}}$ lose it/them$_{\text{IN}}$'

(385) Southwestern Ojibwe (Nichols 1980: 283)

a. ni-wanit-oo-n-**Ø**
1-lose$_{\text{TI}}$-IN.OBJ-N-**IN.SG**
'I lose it'

b. ni-wanit-oo-n-**an**
1-lose$_{\text{TI}}$-IN.OBJ-N-**IN.PL**
'I lose them$_{\text{IN}}$'

(386) Southwestern Ojibwe (Nichols 1980: 285, 287)

a. ni-wanit-oo-minaa-$\boxed{\text{ban}}$-**Ø**
1-lose$_{\text{TI}}$-IN.OBJ-1PL-$\boxed{\text{PRET}}$-**IN.SG**
'we$_{\text{EXC}}$ lost it'

b. ni-wanit-oo-minaa-$\boxed{\text{ban}}$-**en**
1-lose$_{\text{TI}}$-IN.OBJ-1PL-$\boxed{\text{PRET}}$-**IN.PL**
'we$_{\text{EXC}}$ lost them$_{\text{IN}}$'

c. ni-wanit-oo-minaa-$\boxed{\text{dog}}$-**Ø**
1-lose$_{\text{TI}}$-IN.OBJ-1PL-$\boxed{\text{PRET}}$-**IN.SG**
'we$_{\text{EXC}}$ must have lost it'

d. ni-wanit-oo-minaa-$\boxed{\text{dogen}}$-**an**
1-lose$_{\text{TI}}$-IN.OBJ-1PL-$\boxed{\text{PRET}}$-**IN.PL**
'we$_{\text{EXC}}$ must have lost them$_{\text{IN}}$'

Additionally, we don't get this same behavior in Odawa, which preserves peripheral agreement completely in SAP.PL⟶IN scenarios:

(387) Odawa (Rhodes 1976: 147-148)

a. n-biid-oo-naa-**Ø**
1-bring$_{\text{TI}}$-IN.OBJ-1PL-**IN.SG**
'we$_{\text{EXC}}$ bring it'

b. n-biid-oo-naani-**n**
1-bring$_{\text{TI}}$-IN.OBJ-1PL-**IN.PL**
'we$_{\text{EXC}}$ bring them$_{\text{IN}}$'

Thus, the Impoverishment analysis proposed above equally applies here. Note that here too the context for Impoverishment is whenever Infl (the central suffix) indexes a plural SAP and is linearly adjacent to C (the peripheral suffix).

A note on the absolute-objective contrast

For Wampanoag, I've provided objective forms in (383)—these are forms with specific objects. The absolute-objective contrast productively applies to SAP⟶3 scenarios in the languages like Wampanoag (going back to Proto-Algonquian). The corresponding SAP⟶3 absolute forms are provided below, which lack peripheral agreement entirely (as there are no specific third persons to agree with), and thus leave the number of the third person nonspecific object ambiguous:

(388) Wampanoag (absolute forms) (fermino 2000: 40, 53)

a. nu-p8n-ô-mun
1-put$_{\text{TA}}$-3OBJ-1PL
'we$_{\text{EXC}}$ put someone, some people'

b. nu-katânutam-umun
1-want$_{\text{TI}}$-1PL
'we$_{\text{EXC}}$ want something, some things'

Again, we can safely put these absolute forms aside for the purposes of establishing the generalization that in SAP⟶3 scenarios across Algonquian, C indexes the third person internal argument. The lack of peripheral agreement in these absolute forms is due to a separate, intersecting phenomenon—the kind of definiteness/specificity-sensitive differential argument marking found in languages like Wampanoag.

The cross-Algonquian picture is clear here also: in SAP⟶3 scenarios, the peripheral suffix skips over the SAP external argument in preference for the third person internal argument. This strikingly nonlocal behavior is the key piece of evidence for the third person preference of peripheral agreement, and is the telltale sign of an omnivorous probe.

9.2.4 Summary

The pattern across all the scenarios we've seen is summarized below:

(389)

a. C$_{\text{[INT:3]}}$ … [Subj$_{\text{[3]}}$ …] intransitive

b. C$_{\text{[INT:3]}}$ … [EA$_{\text{[3]}}$ … [IA$_{\text{[PART]}}$ …]] 3⟶SAP

c. C$_{\text{[INT:3]}}$ … [EA$_{\text{[PART]}}$ … [IA$_{\text{[3]}}$ …]] SAP⟶3

It seems like we need to be able to specify a probe to be relativized to third person only—in an Interaction-Satisfaction model, this would involve specifying the interaction condition for third person. This requires us to have access to distinct third person features in the syntax—thus, we cannot uphold syntactic 3noP, contra Preminger (2019a) and van Alem (2023).

9.3 Do alternative analyses work?

Or can we? Is there some way for the enterprising 3noP-er to explain their way out of this data? This section tackles this issue, looking at several potential alternative analyses of the data. I address five such alternatives: object movement in SAP⟶3 scenarios, the Activity Condition (Chomsky 2000, 2001), and agreement for animacy, obviation, or the categorial feature [D]. I demonstrate that each of these alternative analyses ultimately fails, forcing us to admit that the right account of Algonquian peripheral agreement involves a probe specified for third person.

9.3.1 Against object movement

The crucial datapoint motivating a third person probe is SAP⟶3 scenarios, as that is when C must be able to skip over a higher SAP in preference for a lower third person. If it's somehow possible to avoid this state of affairs, then there would not be an argument against syntactic 3noP.

We could avoid this conclusion if there was object movement in SAP⟶3 scenarios, with the internal argument moving over the external argument. The resulting syntax under this proposal would be something like the following:

(390) The object movement response

a. C … [$\underline{\text{Subj}}_{\text{SAP/3}}$ …] — Intransitive, agree with subject

b. C … [$\underline{\text{EA}}_{3}$ … [IA_{SAP}] — 3⟶SAP, agree with EA

c. C … [$\underline{\text{IA}}_{3}$ … [EA_{SAP} … [t_{IA} …]]] — SAP⟶3, agree with IA

That is, SAP internal arguments do not move over third person external arguments, but third person internal arguments do move over SAP external arguments. If this is right, then C could just host a plain φ probe that agrees with the closest goal, [INT:φ,SAT:φ], and then it would just be a quirk of the set of Vocabulary Items for C that there are only exponents for third person features, much like English 3SG *-s*.

However, there are a host of good reasons to avoid the syntax in (390). I'll present two such reasons here, one conceptual, and one empirical. The conceptual argument is that, if one tries to actually work out a syntax that generates the behavior in (390), it's unclear how to avoid replicating a need for syntactically-active third person features elsewhere in the system. To see this, let's try to work (390) out. To drive the movement of the internal argument in SAP⟶3 scenarios, we'd need a probe somewhere—for the sake of argument, let's place it in Voice, right below the external argument. We'd then need this probe in Voice to move the internal argument in SAP⟶3 scenarios, but crucially not in 3⟶SAP scenarios. This is the core problem: how could we do this without the probe being specified to only move third person goals? Placing the movement-triggering probe above Voice, c-commanding both external and internal argument, doesn't seem like it would help, as that would just introduce a second problem to solve: why would this probe skip over the external argument in preference for moving the internal argument?

Even if it's possible to overcome this conceptual issue, there are also empirical reasons to avoid the results in (390). While I'm not aware of relevant data for Blackfoot or Wampanoag, it's possible to show for Ojibwe (at least for Odawa) and Passamaquoddy that this syntax is wrong: in SAP⟶3 scenarios, the internal argument does not move over the external argument. We've already seen the argument against this for Passamaquoddy in Section 2.4: in direct configurations (which includes SAP⟶3 scenarios), the internal argument does not move over the external argument. Some of the data that motivated this conclusion comes from the locality of long-distance agreement into subordinative clauses. In SAP⟶3 scenarios, we can only get LDA with the external argument (Grishin 2022):

(391) SAP⟶3: subordinative LDA with SAP EA only in Passamaquoddy

a. Roger **n-puwatom-a-ku-n** [nt-olintuwew-a-n Asawis].
Roger **1-want$_{TI}$-APPL-INV-N** 1-sing.to$_{TA}$-3OBJ-N John
'Roger wants me to sing to John.' (EM, RP 2021.11.17)

b. *Roger **'-pawatom-uw-a-n** [Husaw-ol nt-olintuwew-a-n].
Roger **3-want$_{TI}$-APPL-3OBJ-N** John-OBV.SG 1-sing.to$_{TA}$-3OBJ-N
Intended: 'Roger wants me to sing to John.' (GP, MA 2022.05.16)

As LDA into subordinative clauses displays A-locality properties, this shows us that there is no object movement (over the external argument) in either SAP⟶3 scenarios. Thus, object movement cannot be the right account of third person preference.

A similar phenomenon is found in Odawa, though this time coming from LDA into conjunct clauses.[10] In Odawa, LDA is similarly restricted, only occurring with the embedded argument in the highest A position, just like Passamaquoddy subordinative LDA (Rhodes 1994). When we look at embedded SAP⟶3 scenarios, we find that LDA is only possible with the SAP external argument:

(392) SAP⟶3: LDA with SAP EA only in Odawa

a. **G-gikenm-in** [gii= baashkzw-Ø-ad].
2-know$_{TA}$-2OBJ PST= shoot$_{TA}$-3OBJ-2SG:3CJ
'I know that you shot him.'

b. ***N-gikenm-aa** [gii= baashkzw-Ø-ad].
1-know$_{TA}$-3OBJ PST= shoot$_{TA}$-3OBJ-2SG:3CJ
Intended: 'I know that you shot him.' Odawa (Rhodes 1994: 438–439)

Thus, on the basis of this cross-Algonquian data, I conclude that there is no object inversion in SAP⟶3 scenarios—though, of course, this would need to be explicitly demonstrated in the other languages. However, the fact that there is evidence from several languages *against* third person object inversion, and no concrete evidence from any language in favor of it (as far as I am aware),

[10] We also see this same pattern in Listuguj Mi'gmaq (Hamilton 2018).

I think it's safe to generalize to the pan-Algonquian conclusion. The object movement response to 3yesP cannot be upheld.

9.3.2 Against the Activity Condition

Another alternative analysis that might be able to save syntactic 3noP would be an extension of the Activity Condition analysis of Algonquian peripheral agreement (Oxford 2014, Hammerly 2020, 2021, Xu 2022). This analysis proposes that Infl (central agreement) has the power to deactivate goals for further Agree relations—thus, higher probes, like C (peripheral agreement), can only agree with the "leftovers" that Infl has not touched. As Infl has a clear preference for SAPs, especially in the independent, the result is that C only has third persons left over to agree with. Under this view, third person preference would thus simply be an epiphenomenon of Infl's SAP-preference, so we don't need to specify C for third person, saving syntactic 3noP.

The problem with this proposal is that the Activity Condition analysis of (independent) peripheral agreement can be shown to not work. Within our sample of languages, there are (at least) three kinds of arguments against the Activity Condition analysis: *(i)* independent forms where central agreement and peripheral agreement index the same argument; *(ii)* the availability of cross-clausal A dependencies (using Wurmbrand's 2019 term); and *(iii)* dissimilatory interactions between Infl and C (Oxford 2015, 2017a, 2020a).

Independent forms with doubled agreement

The most straightforward argument against an Activity Condition analysis is that sometimes it's obvious from the surface morphology that Infl and C can agree with the same goal—in other words, we're doubling agreement with a single goal. There are a few contexts where this occurs across Algonquian, though there is quite a bit of variation across the family in this regard. Throughout this part, I will underline the relevant central agreement markers and bold the peripheral suffix.

One common context where this occurs is in obviative subject intransitive forms, where a central suffix deriving from Proto-Algonquian **-(e)li* can index the same argument as a peripheral suffix. This quite reliably occurs in the languages with obviative inanimate subject forms—below I provide examples from Ojibwe, Plains Cree, and Meskwaki:

(393) Southwestern Ojibwe (Nichols 1980: 273)

a. michaa-<u>ni</u>-Ø-**Ø**
be.big$_{\text{II}}$-<u>OBV</u>-3-**IN.SG**
'it$_{\text{OBV}}$ is big'

b. michaa-<u>ni</u>-w-**an**
be.big$_{\text{II}}$-<u>OBV</u>-3-**IN.PL**
'they$_{\text{IN.OBV}}$ are big'

(394) Plains Cree (Dahlstrom 1991: 20)

a. mihkwâ-<u>yi</u>-w-**Ø**
be.red$_{\text{II}}$-<u>OBV</u>-3-**IN.SG**
'it$_{\text{OBV}}$ is red'

b. mihkwâ-<u>yi</u>-w-**a**
be.red$_{\text{II}}$-<u>OBV</u>-3-**IN.PL**
'they$_{\text{IN.OBV}}$ are red'

(395) Meskwaki (Dahlstrom 2015: 4-4)

a. mîškawâ-ni-w-**i**
be.strong$_{\text{II}}$-OBV-3-**IN.SG**
'it$_{\text{OBV}}$ is strong'

b. mîškawâ-ni-w-**ani**
be.strong$_{\text{II}}$-OBV-3-**IN.PL**
'they$_{\text{IN.OBV}}$ are strong'

As is evident, in these forms the central suffixes *-ni* (in Ojibwe and Meskwaki) and *-yi* (in Plains Cree) index the obviation of the subject, and the peripheral suffix indexes its gender and number.

Another similar context with doubled agreement is obviative *animate* subject intransitive forms, as in languages like Plains Cree and Meskwaki (though, interestingly, this doubling doesn't happen in Ojibwe):

(396) Plains Cree (Dahlstrom 1991: 20)

a. pimipahtâ-yi-w-**a**
run$_{\text{AI}}$-OBV-3-**OBV**
'she/they$_{\text{OBV}}$ run(s)'

(397) Meskwaki (Dahlstrom 2015: 4-6)

a. mîškawesi-ni-w-**ani**
be.strong$_{\text{AI}}$-OBV-3-**OBV.SG**
'she$_{\text{OBV}}$ is strong'

b. mîškawesi-ni-w-**ahi**
be.strong$_{\text{AI}}$-OBV-3-**OBV.PL**
'they$_{\text{OBV}}$ are strong'

Again, central agreement and peripheral agreement index the same argument here. Notably, the obviative-subject forms doubly-index the obviation of the subject, expressing obviative through the central suffix *-yi*/*-ni*, as well as the peripheral suffixes *-a* 'OBV' (Plains Cree) and *-ani* 'OBV.SG', *-ahi* 'OBV.PL' (Meskwaki).

Turning to transitive verb forms, in the languages where peripheral agreement indexes the external argument of 3⟶IN verb forms, in OBV⟶IN forms both Infl and C can index the obviation of the external argument, as in Plains Cree and Meskwaki:

(398) Plains Cree (Dahlstrom 1991: 20)

a. wâpaht-am-iyi-w-**a**
see$_{\text{TI}}$-IN.OBJ-OBV-3-**OBV**
'she/they$_{\text{OBV}}$ see(s) it/them$_{\text{IN}}$'

(399) Meskwaki (Dahlstrom 2015: 4-11)

a. wâpat-am-ini-w-**ani**
see$_{\text{TI}}$-IN.OBJ-OBV-3-**OBV.SG**
'she$_{\text{OBV}}$ looks at it/them$_{\text{IN}}$'

b. wâpat-am-ini-w-**ahi**
see$_{\text{TI}}$-IN.OBJ-OBV-3-**OBV.PL**
'they$_{\text{OBV}}$ look at it/them$_{\text{IN}}$'

As before, the obviative marker in the central slot can double obviative peripheral suffixes.[11]

[11] Similar patterns can be found in OBV⟶OBV TA direct and inverse forms in Plains Cree and Meskwaki, though the issue with those forms is that, since *-yi*/*-ni* doesn't differentiate number, we can't tell if the obviative central suffix is indexing the external argument or internal argument, and thus it's not straightforward to identify whether we're getting doubling or not. However, given that this *-yi*/*-ni* marker doesn't appear in PROX⟶OBV and OBV⟶PROX

Finally, in Blackfoot 3⟶3 inverse forms, we very clearly get both Infl and C indexing the internal argument:

(400) *Blackfoot* (Frantz 2017: 62)

a. ots-ikákomimm-ok-Ø-**a**
3-love$_{\text{TA}}$-INV-SG-**SG**
'she/they$_{\text{OBV}}$ love her$_{\text{PROX}}$'

b. ots-ikákomimm-ok-oaa-**yi**
3-love$_{\text{TA}}$-INV-PL-**PL**
'she/they$_{\text{OBV}}$ love them$_{\text{PROX}}$'

In these forms, central agreement *ot-...-Ø* '3SG' and *ot-...-oaa* '3PL' index the proximate internal argument, as do the peripheral suffixes *-(w)a* 'SG' and *-(y)i* 'PL'.

Thus, while in most cases throughout Algonquian Infl and C don't overly index the same argument in the independent, there are several forms where this does happen in a few languages. It's unclear how an Activity Condition analysis of peripheral agreement can be maintained when Infl and C can overtly agree with the same argument in certain cases.

Cross-clausal A dependencies

Most Algonquian languages feature various kinds of cross-clausal A dependencies (Wurmbrand 2019, Lohninger et al. 2022), like long-distance agreement and/or raising phenomena; for some discussion, see Fry and Hamilton (2016). Here is a (likely non-exhaustive) list of Algonquian languages that have been shown to display cross-clausal A dependencies: Arapaho (Cowell and Moss 2008: 391), Blackfoot (Frantz 1978, 1979, 1980, Bliss 2009), Cheyenne (Leman 1986), Plains Cree (Dahlstrom 1991), Woods Cree (Starks 1995), Swampy Cree (Long 1999), Moose Cree (James 1984), Innu (Branigan and MacKenzie 2001, 2002), Western Naskapi (Brittain 2001: Ch. 6), Menominee,[12] Meskwaki (Dahlstrom 2015, 2023), Southwestern Ojibwe (see below), Odawa (Rhodes 1994), Nipissing Algonquin (Lochbihler and Mathieu 2016, Fry and Mathieu 2017), Mi'gmaq (Hamilton 2015c, 2018), and Passamaquoddy (Bruening 2001b, LeSourd 2019a, Grishin 2022, 2023a).

The relevant point here is the following: in all these languages, it's possible for the matrix verb to agree with an embedded argument that has already been indexed by embedded Infl. This is not straightforwardly predicted to be possible under the Activity Condition account (for some overviews of how cross-clausal A dependencies problematize the Activity Condition in general, see discussion and references in Bhatt and Keine 2017 on long-distance agreement and Zyman 2023 on hyperraising).

---

forms, it's probably safe to say that *-yi*/*-ni* tracks the structurally-higher obviative in OBV⟶OBV scenarios, in which case we would be getting doubling.

[12] Examples of likely long-distance agreement in Menominee:

(i) a. Eneq **ǣnǣnem-en-an** [as ackī-yan].
that.IN.is IC.think$_{\text{TA}}$-2OBJ-1SG.CJ AOR be.tired$_{\text{AI}}$-2SG.CJ
'(What) I think (of you is that) you are tired.' Menominee (Bloomfield 1962: 491)

b. **Ne-kōqn-a-w** [as a= mesǣse-t].
1-fear$_{\text{TA}}$-3OBJ-SG AOR FUT= have.seizure$_{\text{AI}}$-3CJ
'I fear him that he will have a seizure.' Menominee (Bloomfield 1962: 494)

In Blackfoot, there are (at least) three kinds of relevant cross-clausal A dependencies: long-distance (object) agreement/hyperraising to object, where the matrix verb shows object agreement with an argument in its complement bearing a focus feature (401a); long-distance (subject) agreement/hyperraising to subject, where the matrix verb shows subject agreement with the subject of its complement (401b); and "hyper" *tough* movement, where the matrix verb shows subject agreement with an object of its complement, potentially across multiple clause boundaries (401c). See Frantz (1978, 1979, 1980) and Bliss (2009) for more details about these constructions in Blackfoot—here I just briefly exemplify them.

(401) a. **Nít-ssksino-a-wa** [k-í'sa **ot**-oksiná'-ssi].
1-know$_{TA}$-3OBJ-PROX.SG 2-brother-PROX.SG **3**-be.cranky$_{AI}$-CONJ
'I know your brother is cranky.' Blackfoot (Frantz 1978: 97)

b. **Kits-íksipisata'pssi** [**kít**-sspomo-a-hsi n-óko's-iksi].
2-be.surprising$_{AI}$ **2**-help$_{TA}$-3OBJ-CONJ 1-kid-PL
'It's surprising that you helped my kids.' Blackfoot (Frantz 1980: 294)

c. **Kits-íksikkinissi** [**kit**-á'pao't-omo-o-hsi].
2-be.easy$_{AI}$ 2-work$_{AI}$-APPL-2OBJ-CONJ
'You are easy for me to work for.' Blackfoot (Frantz 1980: 297)

In (401a), the matrix verb *nítssksinoawa* 'I know about him' shows object agreement with the embedded subject *kí'sa* 'your brother' (with the theme sign *-a* '3OBJ' as well as the peripheral suffix *-wa* 'PROX.SG'), even though *kí'sa* 'your brother' is already indexed by embedded Infl with the prefix *ot-*. In (401b), the embedded (null) subject 'you' is indexed both by embedded Infl and matrix Infl, as revealed by the presence of the person prefix *kit-* in both clauses. In (401c), the embedded (null) object 'you' is also indexed by both embedded and matrix Infl. In all three of these examples, embedded Infl couldn't have deactivated the relevant embedded argument, contra the predictions of the Activity Condition, as that would have prevented the matrix verb from agreeing with it.

We see similar behavior in Passamaquoddy, which has a number of long-distance agreement constructions that involve the matrix verb agreeing with an embedded argument as if it was a matrix object. This is possible into independent clauses (402a), conjunct clauses (402b), as well as subordinative clauses (402c).

(402) a. **N-piluwitaham-a** [$_{IND}$ Piyel '-kisi= komutonom-a-l weni-l].
1-suspect$_{TA}$-3OBJ Peter **3**-PFV= rob$_{TA}$-3OBJ-OBV.SG someone-OBV.SG
'I suspect that Peter robbed someone.' (Bruening 2001b: 260)

b. **'T-assokitaham-a-l** Piyel [$_{CJ}$ eli kci= wewis-oski-**li-t**
3-surprised.at$_{TA}$-3OBJ-OBV.SG Peter IC.C big= investigate-behave$_{AI}$-**OBV-3CJ**
psuwis-ol].
cat-OBV.SG
'Peter is surprised that the cat (OBV) is so nosy.' (GP 2023.01.24)

c. **N-kisehta-ku-n** kisuhs [**n**-piskiqehpusi-n].
1-make$_{\text{TA+O}}$-INV-N sun **1**-blink$_{\text{AI}}$-N
'The sun made me blink.' (GP, RP 2021.11.10)

In each case, the relevant argument is agreed with by embedded Infl—in (402a), *Piyel* 'Peter' is marked by the third person prefix ʼ-, in (402b), *psuwisol* 'the cat (OBV)' is marked by the conjunct central suffixes *-li-t* 'OBV-3CJ', and in (402c) the null first person pronoun is marked by the first person prefix *n-*. And yet, in each case, the matrix verb can still agree with those arguments.

Finally, we find similar long-distance (object) agreement into conjunct clauses across varieties of Ojibwe. I provide examples from three varieties of Ojibwe: Southwestern Ojibwe (403a), Odawa (403b), and Nipissing Algonquin (403c).

(403) a. Nin-gikenim-**aa-g** [ji= jaagizo-**waa-d**].
1-know$_{\text{TA}}$-**3OBJ-PROX.PL** FUT= burn$_{\text{AI}}$-**3PL-3CJ**
'I know they will get burned.' Southwestern Ojibwe (Nichols 1980: 135)

b. N-gikenm-**aa-g** [ninw-ag gii= baashkzw-aa-**waa-d** Maagii-yan].
1-know$_{\text{TA}}$-**3OBJ-PROX.PL** man-PROX.PL PST= shoot$_{\text{TA}}$-3OBJ-**3PL-3CJ** Marge-OBV
'I know that the men shot Marge.' Odawa (Rhodes 1994: 439)

c. O-gikenim-**à-n** [ked-ikedo-**dj** n-òs-an].
3-know$_{\text{TA}}$-**3OBJ-OBV** WH.FUT-say$_{\text{AI}}$-**3CJ** 1-father-OBV
'She knows what my father will say.' Nipissing (Fry and Mathieu 2017: 57)

Despite the fact that the LDA patterns in these varieties show distinct syntactic behaviors—Odawa LDA is restricted to the highest embedded argument (Rhodes 1994), whereas Nipissing Algonquin LDA is free (Lochbihler and Mathieu 2016)[13]—they all pattern alike in the fact that embedded Infl does not deactivate goals for further agreement relations.

Interestingly, Wampanoag doesn't seem to have any kind of long-distance agreement process (Norvin Richards, p.c.). Thus, we cannot use the argument from cross-clausal A dependencies to argue against the Activity Condition account of peripheral agreement in Wampanoag, though the other arguments put forth in this section still apply.

One possible response one might have to this data is to say that only independent Infl has deactivating power, and not Infl in other clause types (see Oxford 2017a on the microparametrization of the Activity Condition). This kind of response is motivated by the Ojibwe data (403), where LDA occurs into conjunct clauses.[14] However, this can't extend to Blackfoot and Passamaquoddy, as LDA is possible in those languages into independent clauses,[15] as well as clause types that use the same morphological material as the independent, like the conjunctive in Blackfoot and the subordinative in Passamaquoddy. Thus, the availability of cross-clausal A dependencies across

[13]LDA in Nipissing Algonquin has semantic effects: namely, the argument you get LDA with is interpreted as the source of the matrix subject's direct evidence for the embedded proposition (Fry and Mathieu 2017); see also Alboiu and Hill (2016) on a similar kind of semantics for a hyperraising to object construction in Romanian.

[14]I do not know whether it's possible to get LDA into independent complement clauses, which are somewhat restricted, only found under verbs of saying and thinking in Ojibwe (Valentine 2001: 669).

[15]Here's an example of LDA into an independent clause in Blackfoot:

Algonquian poses a strong challenge for the Activity Condition account of Algonquian peripheral agreement.

Infl-C interaction

The final argument against the Activity Condition account of peripheral agreement is somewhat indirect, and relies on the following observation that might initially seem like it argues *for* the Activity Condition: generally, across Algonquian, Infl and C cannot overtly index the same goal (we've already discussed the exceptions above, where in certain limited forms agreement is doubled between Infl and C). However, closer investigation of this generalization uncovers a more insightful analysis: when Infl and C agree with the same goal, Infl is Impoverished (just like in our analysis of the inverse, Section 2.4.2) and realized as a default, elsewhere form deriving from Proto-Algonquian umlauting **-ẅ* (Oxford 2015, 2017a, 2020a). The strength of this generalization across Algonquian, which relies on both Infl and C sometimes agreeing with the same goal, ends up militating against the Activity Condition account of peripheral agreement.

In the independent, Infl shows a hierarchical agreement pattern, preferring to agree with SAPs, only agreeing with (animate) third persons if there are no clausemate SAP arguments. C, in contrast, agrees only with third persons. If we take these generalizations at face value, then we predict that in third person intransitives, Infl and C should both agree with the third person subject. However, across Algonquian, we find that in third person intransitives only C shows overt agreement with the subject—Infl is realized as a cognate of Proto-Algonquian umlauting **-ẅ* (which I've so far been glossing '3', but in this section I will gloss 'ẅ'). Thoughout, I will underline the exponent(s) of Infl and bold the exponent of C.

(405) Blackfoot (Frantz 2017: 170)

a. nit-á'po'taki-hpinnaan
1-work$_{\text{AI}}$-1EXC
'we$_{\text{EXC}}$ work'

b. á'po'taki-Ø-**yi**
work$_{\text{AI}}$-ẅ-**PL**
'they work'

(406) Southwestern Ojibwe (Nichols 1980: 276)

a. ni-maajaa-min
1-leave$_{\text{AI}}$-1PL
'we$_{\text{EXC}}$ leave'

b. maajaa-w-**ag**
leave$_{\text{AI}}$-ẅ-**PROX.PL**
'they$_{\text{PROX}}$ leave'

(407) Passamaquoddy

a. n-mewiyawi-pon
1-feel.better$_{\text{AI}}$-1PL
'we$_{\text{EXC}}$ feel better'

b. mewiyawi-w-**ok**
feel.better$_{\text{AI}}$-ẅ-**PROX.PL**
'they$_{\text{PROX}}$ feel better'

---

(404) **Nit-ssksino-a** [áák-ihpiyi an-a-hk Leo apinákosi].
1-know$_{\text{TA}}$-3OBJ FUT-dance$_{\text{AI}}$ DEM-PROX.SG-NVIS Leo tomorrow
'I know Leo will dance tomorrow.' Blackfoot (Bliss 2009: 6)

(408) Wampanoag (fermino 2000: 30)

a. nu-qaqee-mun
1-run$_{\text{AI}}$-1PL
'we$_{\text{EXC}}$ run'

b. qaqee-w-**ak**
run$_{\text{AI}}$-ẅ-**PROX.PL**
'they$_{\text{PROX}}$ run'

In the (a) examples, we have an SAP (first person exclusive) subject of an intransitive, and we see abundant reflexes of Infl agreement—the person prefixes, as well as central suffixes that derive from the Proto-Algonquian first person exclusive **-(e)Hmena·(n)* (in Blackfoot, Ojibwe, and Wampanoag) or the first person inclusive **-(e)Hmena(w)* (in Passamaquoddy).

In contrast, the only exponent of Infl in the third person forms in the (b) examples is *-(ẅ)*, and C bears the task of indexing the features of the third person subject. Thus, it seems like when Infl and C would have indexed the same argument, Infl surfaces as *-(ẅ)*. Crucially, this is not because there is no 3PL exponent of Infl, as there is such an exponent in each language which appears in different environments: Blackfoot *ot-…-oaa*, Ojibwe *o(t)-…-waa*, Passamaquoddy *'(t)-…-(w)a*, and Wampanoag *wu(t)-…-w(ôw)*, all from Proto-Algonquian **we(t)-…-wa·w*.

Strikingly, in clause types that lack C, like the subordinative (see Part I for extensive justification of this conclusion), central suffixes suddenly reappear in third person AI forms. We can see this in the Eastern languages Passamaquoddy and Wampanoag:

(409) Passamaquoddy
't-ewepiya-ni-**ya**
3-rise$_{\text{AI}}$-N-**PL**
'they rise'

(410) Wampanoag[16]
u-wââpee-nâ-**ô**-ut
3-rise$_{\text{AI}}$-N-**PL**-LOC
'(that) they rise up'

As Oxford (2020a) notes, the reappearance of central agreement in the subordinative—precisely the kind of context where peripheral agreement must be absent—strongly indicates that the cause of Infl featuring full φ agreement or being realized as a default form is whether or not C has agreed with the same argument as Infl.

Full φ agreement in Infl also reappears in forms where C has agreed with a different argument. This is the case in Ojibwe, Passamaquoddy, and Wampanoag (objective) 3⟶3 transitives, where Infl will agree with the higher third person and C will agree with the lower third person (for detailed discussion, see Chapter 10).

(411) SW Ojibwe (Nichols 1980: 289)
o-waabam-aa-waa-**n**
3-see$_{\text{TA}}$-3OBJ-PL-**OBV**
'they$_{\text{PROX}}$ see her/them$_{\text{OBV}}$'

(412) Passamaquoddy
't-osakiy-a-wa-**l**
3-watch$_{\text{TA}}$-3OBJ-PL-**OBV.SG**
'they$_{\text{PROX}}$ watch her$_{\text{OBV}}$'

(413) Wampanoag (fermino 2000: 56)
wu-nâw-ô-wô-**h**
3-see$_{\text{TA}}$-3OBJ-PL-**OBV**
'they$_{\text{PROX}}$ see her/them$_{\text{OBV}}$'

[16] This form is from Eliot (1685): *kah cherubimsog ashpunâhettit wunnuppawhunouh, 8waábenaóut wutch ohkeit* 'and when the cherubims lifted up their wings to mount up from the earth' (Ezekiel 10:16).

In these third person direct forms, Infl agrees with the external argument and C agrees with the internal argument—and we see both of these features on the surface.

More striking evidence for Infl-C interaction comes from comparison of the absolute and objective paradigms (see Xu 2021 for more discussion, as well as Chapter 10). Compare the Wampanoag objective form in (414a), where peripheral agreement indexes the specific internal argument, to the absolute form in (414b), where peripheral agreement indexes the external argument, ignoring the nonspecific internal argument:

(414) Wampanoag objective/absolute PROX.PL⟶OBV (fermino 2000: 52, 56)

a. wu-nâw-ô-wô-**h**
3-see$_{\text{TA}}$-3OBJ-PL-**OBV**
'they$_{\text{PROX}}$ see her/them$_{\text{OBV}}$' (objective)

b. nâw-â-w-**ak**
see$_{\text{TA}}$-3OBJ-ẅ-**PROX.PL**
'they$_{\text{PROX}}$ see someone' (absolute)

In the objective form (414a), Infl agrees with the proximate plural external argument and C agrees with the obviative internal argument, and both of these agreement relationships are visible on the surface. However, in the absolute form (414b), C agrees with the proximate plural external argument as well, and now Infl is realized as default *-ẅ*.[17]

All these cases are correctly captured by the generalization that Infl is realized as a default form when Infl and C have agreed with the same goal (Oxford 2015, 2017a, 2020a). This is straightforwardly formalizable as a kind of Kinyalolo's Constraint dissimilatory Impoverishment rule, just like our analysis of inverse marking as the result of Voice-Infl interaction. Indeed, it's striking how general these dissimilatory processes in Algonquian are, as Oxford (2020a) notes: among our three φ probes in Voice, Infl, and C, adjacent probes cannot overtly index the same goal.[18]

The Activity Condition account would need to reverse the causal direction for these patterns, in order to derive the following behavior: when Infl has failed to agree with a particular goal, C is able to agree with it. The challenge for this account is that the environments where Infl needs to have failed to agree don't obviously form a natural class: independent third person intransitives and 3⟶3 absolute transitives, but not subordinative third person intransitives or 3⟶3 objective transitives. However, the complex web of Infl-C interactions falls out naturally given simple, independently-motivated generalizations about the behavior of Infl and C across all Algonquian verbal paradigms, combined with the same kind of dissimilatory Impoverishment rule we have to derive inverse morphology.

The ultimate point here is that this insightful analysis of Infl-C interactions across Algonquian is only possible if Infl and C can agree with the same goal—something that is only possible if Infl does not and can not deactivate goals it has agreed with. Thus, Infl-C interactions, the availability

[17] In these forms, we can clearly see the umlaut associated with *-ẅ*: in the objective form, without *-ẅ*, the theme sign appears in its default allomorph *-ô* /ã:~õ:/ (< Proto-Algonquian long **a·*), but preceding *-ẅ* it fronts to *-â* /a:/ (< Proto-Algonquian long **e·*).

[18] It's interesting, given this generalization, to go back to the forms discussed above where Infl and C show overt agreement with the same goal—these forms are exceptional, given this generalization. Strikingly, all of these forms involve doubling C with the obviative central suffix deriving from Proto-Algonquian **-(e)li* (the single exception, as far as I am aware, being the Blackfoot 3⟶3 inverse). Even more strikingly, **-(e)li* is the *only* exponent of Infl in these forms—there is no prefix, nor can there be any central plural suffix. Thus, there's some clear sense in which **-(e)li* is exceptional. Muehlbauer (2012) proposes that the Plains Cree reflex of this suffix, *-yi*, is a switch reference marker—though McKenzie (2015: 420–421) argues that it is not. I leave the right analysis of **-(e)li* and its unusual behavior across Algonquian for future research.

of cross-clausal A dependencies, and the few exceptional forms where Infl and C have overtly agreed with the same goal all pose a strong challenge to the Activity Condition account of C's third person preference.

9.3.3 Against agreement for animacy

So we can't save syntactic 3noP with the Activity Condition or by object inversion in SAP→3 scenarios. What about changing the properties of the probe on C—is it possible to derive the the surface appearance of third person preference with a probe specified for another feature? One idea that comes to mind is an animacy probe, the intuition going as follows: since first and second person are not contrastive for animacy, but third persons are, maybe only third persons are specified for animacy features. If so, we could specify C to probe for animacy features, which will result in the surface appearance of third person preference, as first and second persons would not be specified for animacy and thus could be skipped over.

The problem with this approach is that we can show that first and second persons are specified for animacy. The relevant data comes from the behavior of finals, which indicate the transitivity of the verb and the animacy of the "absolutive" argument—see the description in Section 2.2.2 for more details. The two crucial observations I'd like to make here are the following: *(i)* finals are sensitive to grammatical, not notional animacy; and *(ii)* first and second persons trigger animate finals. Thus, first and second person must be specified for grammatical animacy, and we cannot derive the surface appearance of third person preference with an animacy probe.

Finals are sensitive to grammatical animacy

As discussed in Section 2.2.1, there isn't a one-to-one correlation between notional and grammatical animacy in Algonquian. While all notional animates are grammatically animate,[19] notional inanimates are split between grammatical animates and inanimates on a somewhat arbitrary basis (though see Dahlstrom 1995, Goddard 2002, and especially Quinn 2019 for careful discussion). For example, in Passamaquody, *polcisol* 'pants' is inanimate, but *ahtulhaw* 'shirt' is animate; *suwon* 'cranberry' is inanimate, but *pskihqimins* 'strawberry' is animate; *tuhp* 'alder' is inanimate,[20] but *masqemus* 'birch' is animate.

This is true for intransitive finals:

(415) a. Woli-hpuk-**ot**-ul <u>suwon-ol</u> keloto-k-il.
good-taste-**II**-IN.PL <u>cranberry-IN.PL</u> IC.be.frozen$_{\text{II}}$-3CJ-IN.PL
'Frozen cranberries taste good.' https://pmportal.org/dictionary/suwon

b. Piluwi-hpuk-**su**-Ø-wok yukk <u>pskihqimins-ok</u>.
different-taste-**AI**-3-PROX.PL these.PROX <u>strawberry-PROX.PL</u>
'These strawberries taste different.' https://pmportal.org/dictionary/piluwihpuksu

[19]There are a few isolated exceptions to this. For instance, in Meskwaki, Dahlstrom (1995) points out two grammatically inanimate notional animates: the inanimate collective noun *mîčipêhi* 'game' (referring to wild animals hunted for food, which are animate), and the inanimate noun *čînawêtîweni* 'kin', referring to one's relatives (an extension of the word's original sense of 'kinship system').

[20]In Passamaquoddy, but not in Wolastoqey.

In (415), we see that inanimate *suwon* 'cranberry' triggers the stative II final *-ot* (415a), whereas animate *pskihqimins* 'strawberry' triggers the corresponding stative AI final *-(o)si* (415b), even though both are berries and notionally inanimate.

This is also true for transitive finals:

(416) a. N-kis-on-**uhm**-on-ol sahti-yil.
1-PFV-buy-**TI**-N-IN.PL blueberry-IN.PL
'I bought blueberries.' (EM 2023.01.04)

b. Ø-Mon-**uw**-a-` minsoss-`.
3-buy-**TA**-3OBJ-OBV.PL raspberry-OBV.PL
'She bought raspberries.' https://pmportal.org/dictionary/monuwal

Here, inanimate *sahtiyil* 'blueberries'[21] triggers the TI final *-uhm* (416a), but animate *minsòss* 'raspberries$_{\text{OBV}}$' triggers the corresponding TA final *-uw*. Again, only grammatical animacy matters here, not notional animacy.

SAPs trigger animate finals

Now that we've established that finals track grammatical animacy, we can ask the following question: do SAPs trigger animate or inanimate finals? The answer is animate finals:

(417) a. n-kosi-hp-**osi**-pon
1-very-hot-**AI**-1PL
'we$_{\text{EXC}}$ are hot/have fevers'

b. nt-askuw-**y**-uku-n
1-wait.for-**TA**-INV-1PL
'she waits for us$_{\text{EXC}}$'

In (417a), the SAP subject triggers the stative AI final *-(o)si* (the corresponding II verb is *ksihpote* 'it is hot', with the stative final *-ote*). In (417b), the SAP object triggers the TA final *-(i)y* (the corresponding TI verb is *'taskuwihtun* 'wait for it', with the TI final *-(i)htu*).

Thus, given that finals track grammatical animacy, and SAPs consistently trigger animate finals, first and second persons must be specified animate.

Animate is not default

One might try to save the animacy agreement account in the following way: maybe SAPs consistently trigger animate finals because animate is actually the default, unvalued option out of the pair animate-inanimate? In other words, maybe AI and TA finals are defaults, which appear when intransitive subject and transitive object aren't specified inanimate?

This can't be right—if anything, *inanimate* is the un(der)specified value of the pair animate-inanimate, as Bruening (2001b: §5.2.3), Goddard (2002), and Dahlstrom (2015: §3.2) argue. There

[21] *Saht* 'blueberry' varies in animacy for different speakers: for some, it's animate, and for others, it's inanimate.

are three core arguments for this: *(i)* inanimate finals appear in default contexts; *(ii)* null pronouns referring to mixed animate-inanimate groups trigger inanimate finals; and *(iii)* inanimate existential quantifiers can have animate referents in their domain.

We can demonstrate the defaultness of inanimate finals in three ways. The first is to note that weather predicates, which are typically thought to be avalent and not take any arguments, are consistently II verbs and/or finals in Passamaquoddy: *komiwon* 'rain$_{\text{II}}$', *-olan* 'rain$_{\text{II}}$', *psan* 'snow$_{\text{II}}$', *-amoqesson*, *-amoqessu* 'storm$_{\text{II}}$', *pqomisiye* 'hail$_{\text{II}}$', *wocawson* 'be windy$_{\text{II}}$', *-olamson* 'wind$_{\text{II}}$', and so on. These verbs don't take overt arguments, and they don't inflect for number—thus, these verbs really do seem to be avalent and not take any arguments. If animate is the default, unspecified feature value for animacy, then these verbs should have been AI, counter to fact. However, if *inanimate* is the default, unspecified feature value, then we can understand why weather predicates are all II.

The second way to demonstrate the defaultness of inanimate is Bruening's (2001b) argument that TI clause-embedding verbs, like in (418), reflect a failure to agree with the complement clause, rather than inanimate singular agreement with the complement clause.

(418) a. **N-kocicihtu-n** [eli yali= kotu-ks-ulti-hti-t apikciluwi-yik].
1-know$_{\text{TI}}$-N IC.C around= want-sleep$_{\text{AI}}$-PL-3PL-3CJ skunk-PROX.PL
'I know that the skunks are going around sleepy.' (EM 2023.01.20)

b. Mehqihtuwat **Ø-wewitahatom-on** [eli Piyel 'cihtihike-t].
Mehqihtuwat **3-remember$_{\text{TI}}$-N** IC.C Peter win$_{\text{AI}}$-3CJ
'Mehqihtuwat remembers that Peter won.' (GP 2020.07.15)

The observation is that, when you conjoin two clauses underneath a TI or AI+O clause-embedding verb, you can't get plural agreement with the two clauses—no matter whether you embed an independent, a conjunct, or a subordinative clause:

(419) a. ***N-kosicihtu-n-ol** [$_{\text{IND}}$ Petak mecimi=te kolusku-Ø] naka [$_{\text{IND}}$ Mali
1-know$_{\text{TI}}$-N-IN.PL Petak always=EMPH lie$_{\text{AI}}$-3 and Mary
mecimi=te Ø-wolamsotuw-a-l].
always=EMPH 3-believe$_{\text{TA}}$-3OBJ-OBV.SG
Intended: 'I know.IN.PL [that Petak always lies] and [that Mary always believes him].'
(Bruening 2001b: 262)

b. **N-unitahasi-n(*-ol)** [$_{\text{CJ}}$ Piyel keti= sukolopan-ke-t] naka [$_{\text{CJ}}$ Norvin
1-forget$_{\text{AI+O}}$-N(*-IN.PL) Peter IC.going.to= cake-make$_{\text{AI}}$-3CJ and Norvin
keti= kossicuwenike-t].
IC.going.to= do.dishes$_{\text{AI}}$-3CJ
'I forgot(*.IN.PL) [that Peter is going to make a cake] and [that Norvin is going to do the dishes].' (GP, MA 2023.05.02)

c. **N-pawatom-on(*-ol)** [$_{SUB}$ Piyel '-sukolopan-ka-n] naka [$_{SUB}$ Norvin '-kossicuwenika-n].
1-want$_{TI}$-N(*-IN.PL) Peter 3-cake-make$_{AI}$-N and Norvin 3-do.dishes$_{AI}$-N
'I want(*.IN.PL) [Peter to make a cake] and [Norvin to do the dishes].'
(GP, MA 2023.05.02)

This isn't because you can't get plural agreement with a coordination of two singulars—plural agreement is always possible, as far as I am aware, when conjoining two singular DPs:

(420) a. Sapet naka Piyel **'-posu-m-uwa-l**
Elizabeth and Peter **3-cat-POSS-PL-OBV.SG**
'Elizabeth and Peter's cat' (GP, MA 2022.11.30)

b. Mali naka Sapet **'-pawatom-oni-ya** wolitahasuwakon.
Mary and Elizabeth **3-want$_{TI}$-N-PL** happiness
'Mary and Elizabeth want happiness.' (EM, RP 2022.06.06)

c. **N-koti= mici-n-ol** musey naka ksapuwihikon sepawonuk.
1-going.to= eat$_{TI}$-N-IN.PL moosemeat and soup tomorrow
'I'm going to eat moosemeat and soup tomorrow.' (GP 2023.04.04)

In (420a) we have plural possessor agreement *'-...-uwa* '3-...-PL' with the conjoined possessor *Sapet naka Piyel* 'Elizabeth and Peter'; in (420b) we have plural agreement *'-...-ya* '3-...-PL' with the conjoined external argument *Mali naka Sapet* 'Mary and Elizabeth'; and in (420c) we have plural agreement *-ol* '-IN.PL' on the matrix verb with the conjoined object *musey naka ksapuwihikon* 'moosemeat and soup'.[22]

Thus, Bruening concludes that these clause-embedding TI verbs aren't actually agreeing with the embedded clause as if it was inanimate—instead, the TI form is just a default, appearing when

[22]Interestingly, in this case, inanimate singular agreement is also possible (probably an instance of closest conjunct agreement):

(i) **N-koti= mici-n-Ø** musey naka ksapuwihikon sepawonuk.
1-going.to= eat$_{TI}$-N-IN.SG moosemeat and soup tomorrow
'I'm going to eat moosemeat and soup tomorrow.' (GP 2023.04.04)

However, there is still a contrast between DP coordination and clausal coordination here: inanimate plural agreement is not possible at all with coordinated clauses, even though it's available with coordinated DPs. For some reason, singular agreement seems to be less preferred with conjoined animate DP objects:

(ii) a. Nil **n-kotuw-ahsom-a-k** Honey naka Winnie sepawonuk.
1SG **1-going.to-feed$_{TA}$-3OBJ-PROX.PL** Honey and Winnie tomorrow
'I'm going to feed Honey and Winnie tomorrow.' (GP 2023.04.04)

b. *Nil **n-kotuw-ahsom-a-Ø** Honey naka Winnie sepawonuk.
1SG **1-going.to-feed$_{TA}$-3OBJ-PROX.SG** Honey and Winnie tomorrow
Intended: 'I'm going to feed Honey and Winnie tomorrow.' (GP 2023.04.04)
GP: "Then that [*nkotuwahsoma*] means only one dog."

I do not know what is the source of this contrast.

the matrix verb has failed to agree with an object. If this is the right conclusion, then this forces us to treat *inanimate* as the default, unspecified value of the pair animate-inanimate.

The third argument for the defaultness of inanimate is the curious fact that adding the applicative marker *-(u)w* onto a verb stem forces it to be TI, even if all the arguments of that verb are animate, as Bruening (2001b: 261) notes:[23]

(421) a. Sapet ‘-kisi-**htu**-w-a-n-ol Piyel-ol sukolopan-ol.
Elizabeth 3-make-**TI**-APPL-3OBJ-N-OBV.SG Peter-OBV.SG cake-OBV.SG
‘Elizabeth made Peter a cake.’ (EM 2021.10.20)

b. Ø-Nomi-**htu**-w-a-n-ol Koles ‘-posu-m-ol.
1-see-**TI**-APPL-3OBJ-N-OBV.SG Grace 3-cat-POSS-OBV.SG
‘I saw Gracie’s cat.’ (GP, MA 2022.03.14)

In (421a) we have a ditransitive goal construction, and all three arguments are grammatically animate, yet we still get the TI final *-(i)htu*. In (421b) we have a possessor raising construction where all three arguments are grammatically animate, yet again we have the TI final *-(i)htu*. As Bruening notes, if TI finals always reflected agreement with an inanimate argument, then these kinds of examples should be ungrammatical, as there is no inanimate argument in sight. However, if inanimate is default, then we don’t get any clash in features.[24]

The “animate as default” idea that one might pitch to rescue the animacy agreement account of apparent third person preference would be hard pressed to be able to account for the fact that it’s actually *inanimate* that consistently appears as the default feature value, especially in contexts of failed agreement.

Dahlstrom (2015) provides another argument in favor of the unmarkedness of inanimate, making the observation that for Meskwaki that, in contexts where a null pronoun is understood to refer to a mixture of animate and inanimate referent, we get inanimate verb forms:

> “Suppose, however, that a verb is inflected for a pronominal argument which is understood to refer to a combination of animate and inanimate third persons. Which gender would be used for the pronominal argument? The one textual example which has been found uses inanimate gender: *mi·čikwe·na* ’whoever ate them [inanimate]’ Kiyana 1913:54K, where the context makes it clear that the things eaten are strawberries (inanimate) and a kind of fish (animate). The choice of inanimate in this context is not surprising since inanimate is the semantically unmarked, elsewhere category of the gender system.”
>
> Dahlstrom (2015: 3-11)

[23]There’s another applicative marker *-ew* that can suffix to any kind of verb stem, not just TI stems. I leave this one aside here—I do not know what other differences there are between these two applicative markers. More research is clearly required. At least impressionistically, *-ew* doesn’t seem to be very productive, whereas *-(u)w* is extremely productive.

[24]This insight comes short of a full analysis of why *-(u)w* always combines with TI finals—or alternatively, why the TI-TA distinction is neutralized under *-(u)w*. I will not provide a full analysis of this phenomenon, as it’s somewhat out of the scope of the discussion here, and I leave this particular issue aside for further research. See Hamilton (2015a) for an account of this based on (a proposed lack of) Feature Inheritance between Voice and *v* in ditransitives.

This verb form uses the TI stem *mîčî-* 'eat' to refer to eating both strawberries (animate) and fish (inanimate)—another indication that it's inanimate, not animate, that is default.

Finally, both Goddard (2002) and Dahlstrom (2015) note that, in Meskwaki, the inanimate existential quantifier *kêkôhi* 'something, anything' can be used in contexts where its domain can only be plausibly understood as containing (perhaps exclusively) animate referents—for instance, as the object of verbs like 'kill':

(422) a. Âkwi =mâh =nîna <u>kêkôhi</u> **neht-ô**-yân-ini.
NEG =you.see =1SG <u>anything</u> **kill$_{\mathrm{TI}}$-IN.OBJ**-1SG.CJ-NEG
'I have not killed anything.' Meskwaki (Goddard 2002: 221)

b. Âkwi <u>kêkôhi</u> **neht-ô**-wâ-č-ini šîšâ-č-iki.
NEG <u>anything</u> **kill$_{\mathrm{TI}}$-IN.OBJ**-3PL-3CJ-NEG IC.hunt$_{\mathrm{AI}}$-3CJ-PROX.PL
'The ones who were hunting didn't kill anything.' Mesk. (Dahlstrom 2015: 3-11)

Goddard and Dahlstrom conclude on the basis of this kind of data that inanimate must be default and unmarked, in contrast to animate.

In sum: it is highly implausible that animate is unmarked in Algonquian languages. We can't save the animacy agreement account of third person preference by claiming that animate is default. We have to conclude that first and second person are grammatically specified as animate, and we cannot say that they are actually underspecified for animacy—thus, an animacy probe is not able to skip over potential SAP goals, and it fails to derive third person preference.

9.3.4 Against agreement for obviation

Another potential alternative probe specification one might try is to say that C probes for *obviation* features (proximate-obviative). The intuition behind this approach is similar to the animacy agreement approach: first and second person do not show a proximate-obviative contrast, so we might imagine that first and second person are unspecified for obviation. Thus, if C probes for obviation features, it'll only find third persons, deriving the surface appearance of third person preference without having to give up syntactic 3noP.

This kind of analysis isn't straightforward to respond to, as there is no general consensus as to what obviation is exactly, and there are numerous proposals in the literature for how to represent it morphosyntactically. Here, I'll address three families of analyses of obviation, and I'll argue that none of them is unproblematically able to derive third person preference. They are:[25]

(423) a. Contrast Everywhere:
Proximate and obviative are in principle contrastive on all persons (Hammerly 2020).

b. SAP=Proximate:
Proximate and obviative are only contrastive on third persons, and first and second person are always proximate (Bruening 2001b, Lochbihler 2012, Oxford 2019b).

c. 3 Only:

[25]There is at least one other proposal in the literature, which is that obviation is contrastive only on third person, first person is always proximate, and second person is always obviative (Bliss and Jesney 2005). I set this view aside here—it faces the same issues as SAP=Proximate.

Proximate and obviative are only contrastive on third persons, and first and second person are not specified for obviation (Bondarenko 2020).

I'll address each of these options, considering how they would implement an obviation probe, and showing that the obviation agreement account of third person preference fails in each case. Contrast Everything and SAP=Proximate only make the argument for 3yesP stronger, and 3 Only is logically equivalent to positing a third person feature. Thus, an obviation probe cannot save syntactic 3noP.

Contrast Everywhere

Under Contrast Everywhere, obviation is in principle contrastive on all persons—it is just an accident that in most languages, it only happens to be contrastive on third persons. If so, one could say that the surface appearance of third person preference is due to the confluence of two independent factors: *(i)* first and second person happen to be underspecified for obviation in the relevant language; and *(ii)* C is probing for obviation features.

The problem with this is that one of the core data points that motivates Contrast Everywhere is the Blackfoot independent pronominal paradigm, which features what seems like a proximate-obviative contrast on each personal pronoun, using the suffixes *-(w)a* ‘PROX.SG’ and *-(y)i* ‘OBV.SG’ that are the nominal proximate and obviative markers, as pictured in Table 9.3.4.[26]

The independent pronouns are morphologically complex, comprising of a pronominal stem *iisto* combined with several person-number affixes. The pronominal stem is likely cognate to the stem *(o)isto* ‘body’—a development also attested in Meskwaki for the *nîyawi* series of pronouns (Dahlstrom 1988). Strikingly, the independent pronouns look very much like inalienably possessed nouns, which lines up with the diachronic picture (Wiltschko et al. 2015). Thus, from a diachronic perspective, the presence of a "proximate-obviative" distinction on these pronouns makes a lot of sense, as (historically) they were just third person DPs, subject to the proximate-obviative contrast just like all other third person DPs. However, synchronically, the first and second person independent pronouns are clearly first and second person, as they they trigger first and second person agreement on the verb.

The reason I've been hedging here on whether or not these *-(w)a* and *-(y)i* suffixes on pronouns are really proximate-obviative markers is because their morphosyntactic distribution does not obviously mirror the morphosyntactic distribution of obviation on third persons. Indeed, it's still not entirely obvious what these suffixes are really doing on the independent pronouns: as Bliss (2013) puts it, "it is yet unclear what determines whether a local independent pronoun is marked as proximate or obviative" (Bliss 2013: 253); see also discussion by Wiltschko et al. (2015). One striking example of this mismatch is the fact that the "obviative" forms of the third person

[26] Wiltschko et al. (2015) note that there's dialectal variation in this regard, with *-(w)a* ("proximate") marked third person pronouns unavailable in the Kainaa dialect of Blackfoot. Frantz (2017) similarly does not indicate a "proximate-obviative" contrast for third persons (only showing forms with *-(y)i* ("obviative"), though he mentions that the first and second person pronouns do contrast *-(w)a* and *-(y)i*.

[27] Wiltschko et al. (2015) give the 3SG "obviative" form as *o-(ii)stóa-yi*, but the examples in the text are all of the form *oostóyi*, and Frantz (2017) lists the form as *ostóyi* (Frantz 1991 lists it with a long initial vowel, *oostóyi*—the length of the initial vowel must be subject to interspeaker/dialectal variation). Thus, I assume that the final *a* in the pronominal stem must be a typo, especially as it's not found in any of the other forms.

	PROX?	OBV?
1	*n-iistó-wa*	*n-iistó-yi*
2	*k-iistó-wa*	*k-iistó-yi*
3	*o-(o)stó-wa*	*o-(o)stó-yi*[27]
1EXC	*n-iistó-nnaan-a*	*n-iistó-nnaan-i*
1INC	*k-iistó-nnoon-a*	*k-iistó-nnoon-i*
2PL	*k-iistó-waaw-a*	*k-iistó-waaw-i*
3PL	*o-(o)stó-waawa-wa*	*o-(o)stó-waawa-yi*

Table 9.1: Blackfoot independent pronouns (adapted from Wiltschko et al. 2015: 266)

pronouns can co-occur with *proximate* demonstratives (424a) and trigger *proximate* agreement on verbs (424b):

(424) a. **Ann-a** o-osto-yi iik-sspitaa.
DEM-PROX.SG 3-PRN-OBV.SG? very-be.tall$_{\text{AI}}$
'He's very tall.' Blackfoot (Wiltschko et al. 2015: 277)

b. O-ostó-yi i'tsini-iksikki'tsi-m-**a**.
3-PRN-OBV.SG? all-take.care.of$_{\text{TI}}$-IN.OBJ-**PROX.SG**
'Him, he took good care of everything.' Blackfoot (Russell and Genee 2014: 16)

Setting that aside, let's take for granted that Blackfoot really does feature a proximate-obviative contrast on SAP pronouns, as this is a major motivator for the Contrast Everywhere view of obviation.

If we were to derive third person preference as an obviation probe under Contrast Everywhere, we would predict that in Blackfoot, first and second person independent pronouns should count as interveners for peripheral agreement, as they have obviation features. The problem is that this is not true: SAP pronouns are not intereveners for peripheral agreement, and we still get third person preference even with independent pronouns in the clause:

(425) a. N-iistó-wa nit-ákomimm-a-**yini** an-i ninàá-yi. SAP→$\boxed{3}$
1-PRN-PROX? 1-love-3OBJ-**OBV.SG** DEM-OBV man-OBV
'I$_{\text{PROX?}}$ love that man$_{\text{OBV}}$.'

b. Om-a ninàá-wa nit-ákomimm-ok-**a** n-iistó-yi. $\boxed{3}$→SAP
DEM-PROX man-PROX 1-love-INV-**PROX.SG** 1-PRN-OBV?
'That man$_{\text{PROX}}$ loves me$_{\text{OBV?}}$.' Blackfoot (Wiltschko et al. 2015:276)

In (425a), we have an SAP→3 configuration, and peripheral agreement skips over the first person "proximate" pronoun *niistówa* in preference for the third person object *ani ninàáyi* 'that man$_{\text{OBV}}$'. In (425b), in contrast, peripheral agreement indexes the third person external argument *oma ninàáwa* 'that man$_{\text{PROX}}$'. Thus, Blackfoot still robustly displays third person preference, even when there are SAP independent pronouns around. We cannot analyze the peripheral agreement probe in Blackfoot as an obviation probe—it has to be a third person probe.

The conclusion: if you accept Contrast Everywhere, then you are forced to accept 3yesP, as Blackfoot peripheral agreement cannot be analyzed away as an obviation probe.

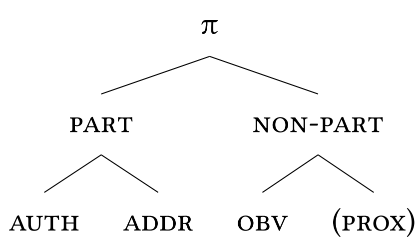
SAP=Proximate

On the SAP=Proximate view, first and second persons are always specified proximate, following Bruening (2001b), Lochbihler (2012), and Oxford (2019b) (among others). This view takes the Blackfoot-specific problem discussed above and magnifies it into a pan-Algonquian problem. Now *every* Algonquian language has SAPs specified for obviation (they're specified proximate), and so SAPs should act as interveners for peripheral agreement in *every* Algonquian language. Not so—as we've seen, in both SAP⟶3 and 3⟶SAP scenarios, C agrees with the third person and not the SAP. If you believe SAP=Proximate, then the obviation agreement analysis of peripheral agreement is simply a non-starter as a rescue operation for 3noP.

3 Only

So—if we want to save 3noP with an obviation probe, we need to ensure that first and second persons are *never* specified for obviation. This is true under Bondarenko's (2020) feature geometry for person and obviation:[28]

(426)



Under this feature geometry, there is no way for first or second persons to be specified for obviation—thus, we are able to target third persons only with an obviation probe.

That obviation probe would have to be specified for [non-part], in order for it to interact with both proximate as well as obviative goals. Here's the issue: in what sense is [non-part], the node dominating [prox] and [obv], distinct from a third person feature? It's not, as Bondarenko (2020) notes—she follows Nevins (2007) in accepting 3yesP, and treats proximate and obviative as subnodes of third person. Thus, if you accept 3 Only, you're forced into accepting 3yesP.

To summarize: 3noP cannot be saved by treating C as an obviation probe rather than a third person probe no matter the analysis of obviation. Contrast Everywhere and SAP=Proximate make the problematic prediction that SAPs should act as interveners for peripheral agreement (they do not), and 3 Only amounts to positing a third person feature.

9.3.5 Against agreement for [D]

All the rescue missions for 3noP have failed so far. There is one last option to consider, which is suggested by Oxford (2014, 2017d) and Xu (2022): agreement for the categorial feature [D].

[28] I've relabeled Bondarenko's spkr (speaker) to auth. The feature [prox] is in parentheses because Bondarenko doesn't make a commitment to whether it really exists or not.

The idea is inspired by Oxford's (2014) proposal that third person nominals are DPs, and first and second person nominals are ϕPs.[29] The core issue for Oxford (2014) is the right analysis of the Algonquian UNSPECIFIED SUBJECT construction, which is a kind of passive or impersonal construction: there is no (overt) expression of the agent argument, and the agent is interpreted as indefinite/nonreferential, as in the following Passamaquoddy examples:

(427) a. N-kisi= kiptuh-uk.
1-PFV= knock.over$_{\text{TA}}$-INV.X
'I got knocked over.' (EM 2022.10.12)

b. Totol-uwikh-a Gracie.
PROG-depict$_{\text{TA}}$-3OBJ Gracie
'Gracie is getting her photo taken.' (GP, MA 2023.02.07)

Observe that with SAP internal arguments, the unspecified subject construction triggers the use of a special allomorph of the inverse marker, *-(o)ke* in Passamaquoddy (427a), but with third person internal arguments, there is no (and cannot be any) inverse marker (427b). Thus, descriptively, the "unspecified subject" ranks below first and second persons but above third persons in the person hierarchy. Oxford (2014) ends up proposing that the unspecified subject construction involves a syntactically-present (null) external argument, and that this external argument is a ϕP, like first and second person pronouns, but lacks (privative) [PART], like third persons.[30]

Oxford provides the following independent argument for this conclusion: first and second person do not participate in obviation and absentative marking, unlike third person (modulo the *-(w)a* and *-(y)i* markers found on Blackfoot independent pronouns), and he proposes that we can understand these facts if those features are located in D, and first and second person lack D. However, he doesn't provide independent evidence that obviation and absentative features must be found in D, so this argument ends up somewhat circular.

A perhaps more pressing problem with the proposal that SAP pronouns and third person pronouns differ in their syntactic size comes from applying diagnostics of pronoun size from Déchaine and Wiltschko (2002a): with these diagnostics, Wiltschko et al. (2015) argue that all Blackfoot independent pronouns are ϕPs, and Déchaine et al. (2015) argue that all Plains Cree independent pronouns are DPs. Neither conclusion involves a structural asymmetry between SAP and third person pronouns. This seems to militate against the [D] agreement account of the third person preference of peripheral agreement.

Or does it? Oxford (2017d) acknowledges this challenge, and suggests that "since emphatic pronouns are excluded from clausal argument positions, they do not participate directly in subject/object agreement" (Oxford 2017d: 18). In other words, the proposal is that overt pronouns in Algonquian always have a Pronominal Argument Hypothesis-esque syntax, never being merged in theta positions, but rather only in clause-peripheral adjunct positions.

[29] Oxford's idea is inspired by van Gelderen (2013), who makes the same proposal for English. However, Déchaine and Wiltschko (2002a) argue for the exact opposite conclusion for English, namely that first and second person pronouns are DPs whereas third person pronouns are ϕPs.

[30] This idea is similar to Legate's (2014) proposal for the syntax of the Icelandic "grammatical object passive" construction, also known as the "new passive" or "new impersonal", which involves an expletive subject, a passive nonagreeing verb form, and an accusative-marked internal argument—she also proposes that the expression of the agent in this kind of impersonal construction is a ϕP.

This conclusion seems unlikely to me. Though it is true that Algonquian overt pronouns very often surface in clause-peripheral topic and focus positions—a natural extension of the fact that Algonquian languages are rampantly *pro*-drop—saying that Algonquian overt pronouns cannot occupy argument positions is too strong of a claim, as overt pronouns *can* occasionally surface in clause-internal positions. As an example, in Plains Cree, overt pronouns can appear as resumptive elements in left-dislocation constructions:

(428) a.

...mâka	John	**wîya**	miywêyiht-am	êkw'	anima.
but	John	**3SG**	like$_{\text{TI}}$-IN.OBJ	TOP	that.IN

'...but John, he likes that.' Plains Cree (Déchaine et al. 2015:44)

b.

Nîsta	**nîya**	mîna	ni-wî=	tôhtâ-n.
1SG.too	**1SG**	also	1-FUT=	go$_{\text{AI}}$-PART.SG

'Me too, I'm also going to go too.' Plains Cree (Déchaine et al. 2015:51)

In (428a), the third person pronoun *wîya* resumes the contrastively-focused and left-peripheral *John*, and in (428b), the first person pronoun *nîya* resumes the additive pronoun *nîsta* 'me too', a left-peripheral contrastive topic. In these examples *John* and *nîsta* are most likely occupying left-peripheral Ā positions, but the pronouns *wîya* or *nîya* look more like they occupy clausal-internal argument positions, resuming the left-dislocated constituents.

Pronouns can also occur postverbally, preceding other arguments and VP adverbs, as in the following Passamaquoddy and Southwestern Ojibwe examples:

(429) a.

Psi=te	litahas-ultu-Ø-wok	espons-ok	Ø-nokka-hl-a-k
all=EMPH	think$_{\text{AI}}$-PL-3-PROX.PL	raccoon-PROX.PL	1-completely-eat$_{\text{TA}}$-3OBJ-PROX.PL

nil	cikoni-hik.
1SG	apple-PROX.PL

'All the raccoons think I ate all the apples.' (GP, RP 2021.05.10;CD)

b.

In-gii= wiisin	**niin**	zhigwa.
1-PST= eat$_{\text{AI}}$	**1SG**	already

'I already ate.' SW Ojibwe (https://ojibwe.lib.umn.edu/main-entry/niin-pron-per)

It seems highly unlikely that these pronouns occupy non-argumental, clause-peripheral positions. If anything, they are probably *in situ* within VoiceP.

Additionally, pronouns can appear below negation, again suggesting they're not (always) base-generated in a left-peripheral position:

(430) a.

Ma=te	**nil**	Ø-nihtawi=	cihcihke-w.
NEG=EMPH	**1SG**	1-know.how=	steer$_{\text{AI}}$-NEG

'I don't know how to steer a canoe.' https://pmportal.org/dictionary/cihcihke

b.

Nil=oc	nt-ewepehl-a	skat	**kil**	koti=	ewepehl-a-w-on.
1SG=FUT	1-raise$_{\text{TA}}$-3OBJ	NEG	**2SG**	going.to=	raise$_{\text{TA}}$-3OBJ-NEG-2SG.CJ

'I will raise him if you don't want to.' https://pmportal.org/dictionary/ewepehlal

However, the strength of this argument is significantly weakened by proposals that negative particles in Algonquian languages occupy CP-layer specifier positions (Brittain 1996, Déchaine and Wiltschko 2002b, 2003, Tilleson 2019)—though see discussion by Bruening (2019). One relevant note is that *wh* items precede negative particles, as in the following Passamaquoddy and Sheshatshiu Innu examples, so negative particles—at least those that can appear in *wh* questions—must be lower than whatever CP layer *wh* items move to:

(431) a. **Keq** skat wewitahatom-uh-k Piyel kisi= mil-uk Susehp?
what NEG IC.remember$_{TI}$-NEG-3CJ Peter IC.PFV= give$_{TA+O}$-1SG:3CJ Joseph
'What doesn't Peter remember that I gave to Joseph?' (Bruening 2001b: 173)

b. **Auen** ekâ niâtâu= pimipanitâ-t utâpân-inu?
who NEG IC.know.how= drive$_{TI}$-3CJ car-IN.OBV.SG
'Who doesn't know how to drive a car?' Sheshatshiu Innu (Brittain 1996: 26)

Another option presented in the literature is that negative particles are C^0 heads (Brittain 1996, 2001)—this proposal would be compatible with the *wh* question data, and it would force the overt pronouns in (430) to be lower than CP. In any event, more research is clearly necessary to understand the syntax of negation across Algonquian.

The last piece of evidence for the clause-internal position of overt pronouns comes from those languages that allow preverbs to be split from the verb stem—in these languages, overt pronouns can appear in this intraverbal position, like in Passamaquoddy and Meskwaki:

(432) a. Nt-ahcuwi= 'tawi= **nil** kakaw-hom.
1-have.to= know.how= **1SG** fast-swim$_{AI}$
'I have to know how to swim fast.' (EM 2022.08.15)

b. Ne-kwayâši= kêh **nînâna** anehkâtî-pena.
1-already= but **we.EXC** be.acquainted$_{AI}$-1PL
'But WE were already acquainted with each other.' Meskwaki (Dahlstrom 1988:168)

It seems highly unlikely that these pronouns are in clause-peripheral Ā positions—they're appearing sandwiched between modal/aspectual preverbs and the verb stem, which suggests that they must be rather low in the structure.

I think this data pushes us to accept the simplest conclusion: overt pronouns can and do indeed appear in argument positions in Algonquian. While overt pronouns are usually interpreted as topics/foci in Algonquian languages, and thus tend to surface in sentence-peripheral topic/focus positions (Dahlstrom 2017b), they can appear overtly even *in situ*. So: we do actually need to be able to agree with overt pronouns in argument positions, contra Oxford (2017d).

Therefore, if we accept Wiltschko et al. (2015) and Déchaine et al.'s (2015) conclusions that there are no differences in the size of SAP and third person pronouns (at least in Blackfoot and Plains Cree), then the [D] agreement account will not correctly derive third person preference.

9.4 Consequences and conclusions

At the end of this long journey through five potential alternative analyses of the third person preference of peripheral agreement, I hope to have shown that only a true third person probe is able to capture the behavior of peripheral agreement across Algonquian. We can't derive third person preference by messing with the syntax elsewhere in the clause, such as with object movement in SAP→3 scenarios or by appealing to the Activity Condition and having Infl deactivate SAPs, nor can we derive third person preference by modifying the specification of the peripheral agreement probe to animacy, obviation, or [D]. Ultimately, we cannot save syntactic 3noP—third person must be specified even in the syntax.

In this section, I'd like to address four further issues: *(i)* how to implement a third person probe in the three 3yesP theories laid out in Section 9.1.1—Nevins's (2007), Harbour's (2016), and Bondarenko's (2020); *(ii)* a surprising (and correct) prediction I make, based on the conclusion that inanimates are specified for person (specifically, third person); *(iii)* the kinds of predictions 3yesP makes and what kind of empirical data would help us further winnow down the set of possible theories of person; and *(iv)* how to capture the the defaultness of third person under 3yesP.

9.4.1 Implementation

It's worth considering at this point how different 3yesP theories could implement a third person probe. For concreteness, I'll be using an interaction-satisfaction model of Agree (Deal 2015a, 2022, 2023), focusing on the interaction conditions here—this choice is not crucial for the discussion ahead, as the general ideas can be ported over relatively straightforwardly to other models of Agree.

Let's recap the three 3yesP theories of person introduced in Section 9.1.1—Nevins's (2007), Harbour's (2016), and Bondarenko's (2020). They result in the following featural specifications of the four persons:

(433) a. [−PART, −AUTH]: third person — Nevins (2007)
b. [+PART, −AUTH]: second person
c. [+PART, +AUTH]: first person (exclusive)
d. [+PART, +AUTH, ADDR]: first person inclusive

(434) a. [−PART, −AUTH]: third person — Harbour (2016)
b. [+PART, −AUTH]: second person
c. [−PART, +AUTH]: first person exclusive
d. [+PART, +AUTH]: first person inclusive

(435) a. [π, 3]: third person — Bondarenko (2020)
b. [π, PART, ADDR]: second person
c. [π, PART, AUTH]: first person exclusive
d. [π, PART, AUTH, ADDR]: first person inclusive

One core difference between these theories is that Nevins (2007) and Harbour (2016) opt for binary features, whereas Bondarenko (2020) opts for privative features. Bondarenko (2020) simply adds a privative [3] feature (which she actually calls [NON-PART], but I've renamed it to [3] for simplicity) to a standard privative feature theory *à la* Béjar (2003). Nevins (2007) and Harbour (2016) are quite similar except for how they distinguish exclusive from inclusive first person. For Nevins (2007), both first persons are specified [+PART, +AUTH], but the representation of first person inclusive additionally contains the privative feature [ADDR]. In contrast, Harbour (2016) takes the somewhat unusual approach of having first person exclusive be specified [−PART], in contrast to first person inclusive which is [+PART]—both, however, share the specification [+AUTH] (see Harbour 2016 for extensive discussion of how to make sense of this semantically, a topic which does not concern us here).

How would each of these theories relativize a probe to third person? With Bondarenko's (2020) representations it's extremely straightforward: we just set the interaction condition to [INT:3]. With Nevins's (2007) representations, note that only third person hosts the feature [−PART]. Thus, if we allow ourselves to be able to specify probes for negative values of binary features, then we can set the interaction condition to [INT:−PART], deriving third person preference. We can't simply repeat that for Harbour's (2016) representations, though, as [−PART] doesn't uniquely identify third person—that feature is shared with first person exclusive. Rather, it's the *combination* of both [−PART] *and* [−AUTH] that uniquely identifies third person (and renders this a 3yesP system). Thus, we'd need to specify our third-person-preferring probe for *both* features—in other words, it would need to be a COMPOSITE/FUSED probe (Coon and Bale 2014, van Urk 2015, Colley and Privoznov 2020, Scott 2021, Lohninger et al. 2022, a.o.). Thus, we could specify the probe's interaction condition to be CONJUNCTIVE, [INT:−PART $\wedge$ −AUTH], so that it only interacts with goals that have both [−PART] and [−AUTH] features—i.e. only third persons.[31]

An additional point to consider is that I've shown that peripheral agreement in Algonquian languages only interacts with third person goals. However, the features that are realized by the peripheral suffix are number, obviation, and animacy (as well as, somewhat trivially, third person).

[31] It's worth commenting on this move a bit. Strictly speaking, Deal's (2023) algorithm doesn't allow for the possibility of composite probes of this type, as it doesn't really allow for conjunctive interaction or satisfaction conditions. The reason is that the algorithm only checks *overlap* between the features of the goal G and the interaction/satisfaction conditions of the probe P—the interaction check is $\mathscr{F}(\mathsf{G}) \cap \mathtt{int}(\mathsf{P}) \neq \varnothing$, the truth of which will cause the features of the goal will be copied onto the probe, and the satisfaction check is $\mathscr{F}(\mathsf{G}) \cap \mathtt{sat}(\mathsf{P}) \neq \varnothing$, the truth of which will cause the algorithm to stop. These tests only allow for *disjunctive* kinds of interaction and satisfaction conditions: if the interaction condition has multiple feature specifications, then the probe will copy features if at least one of those features is found on a goal; similarly, if the satisfaction condition has multiple feature specifications, then the probe will halt if at least one of those features is found on a goal. In contrast, Scott (2021) proposes that it's possible to have *conjunctive* satisfaction conditions which only halt probing if *both* parts of the satisfaction condition are found on a goal. This would require a modification of the satisfaction test to something like $\mathscr{F}(\mathsf{G}) \cap \mathtt{sat}(\mathsf{P}) = \mathtt{sat}(\mathsf{P})$, which would result in halting iff all the features in the satisfaction condition of P are present on the goal. In principle we could perform the same move for interaction conditions, $\mathscr{F}(\mathsf{G}) \cap \mathtt{int}(\mathsf{P}) = \mathtt{int}(\mathsf{P})$, resulting in a probe that only copies features from goals that contain *all* the features in the interaction condition of the probe. Though Scott (2021) proposes a conjunctive satisfaction analysis of composite probe behavior, it's actually unclear to me why this is the case—as far as I can tell, the data she discusses would also be correctly captured with a conjunctive interaction condition. I leave it to further research to tease apart these two options, as well as to understand the full range of possible conjunctive/disjunctive interaction and satisfaction conditions. See also Oxford (2022), who also proposes conjunctive satisfaction conditions, but accompanied by a novel proposal about how the interaction-satisfaction model works with equidistant goals.

Thus, the probe needs to be able to copy *more* features than just the ones it's specified for. We could capture this by saying that agreement is *featurally coarse*, copying *all* the features of the goal (Preminger 2014, Hammerly 2020, 2021, Bondarenko and Zompì 2021, Joshi 2021).[32] Interestingly, Deal's (2023) Agree algorithm does not have this property: probes only copy those features from the goal that intersect with the probe's interaction condition, and no more. However, on the basis of our data, we might want to say that this is wrong—Agree really is featurally coarse.

One possible response is to say that the peripheral suffix is actually derived by clitic doubling, and that clitic doubling is featurally coarse, in contrast to pure φ Agree, which isn't (Preminger 2014). There is a large literature discussing the difference between pure φ Agree and clitic doubling (Preminger 2009, Harizanov 2014, Kramer 2014, Baker and Kramer 2018, Yuan 2021, a.m.o.), where clitic doubling is taking to involve movement/incorporation of something like D into a higher functional projection. While it's possible to do this mechanically, it's unclear to me what might motivate this analytical move. The empirical differences between true φ Agree and clitic doubling are extremely subtle, especially given various theoretical advances which put into question common diagnostics that are classically used to distinguish the two options, like the linking of movement and Agree (Chomsky 2000, 2001, a.m.o.), more sophisticated theories of morphology like Distributed Morphology (see discussion by Yuan 2021 on the unsuitability of putative morphological diagnostics of clitic doubling), and the observation that certain kinds of definite/specific DPs in many typologically distinct languages move to structurally higher positions (Holmberg 1986, Diesing 1992, 1996, Woolford 1995, 1999, 2017, Bhatt and Anagnostopoulou 1996, Bruening and Rackowski 2001, Baker and Vinokurova 2010, López 2012, Xu 2021, Yuan 2022, a.m.o.), which can feed the locality of certain agreement operations.

However, for what it's worth, peripheral agreement in Algonquian doesn't pattern like clitic doubling on any φ Agree vs. clitic doubling diagnostic that I'm aware of. For instance, in Passamaquoddy, peripheral agreement is possible with nonreferential DPs, like indefinites scoping under negation:

(436) a. Ma=te weni-l 't-asqotomuw-a-wi-**yil**.
NEG=EMPH who-OBV.SG 3-leave.food.for$_{\text{TA}}$-3OBJ-NEG-**OBV.SG**
'He doesn't leave anyone a bite to eat.'
https://pmportal.org/dictionary/piksuwatomon

b. Ma=te weni-l 't-iyw-a-wi-**yil**.
NEG=EMPH who-OBV.SG 3-have$_{\text{TA}}$-3OBJ-NEG-**OBV.SG**
'She doesn't have anyone.' https://pmportal.org/dictionary/ktomakeyu-tomakeyu

Ultimately, I don't think that peripheral agreement in Algonquian languages is very likely to have a clitic-doubling derivation.

I think this is true even for the languages that have a definiteness/specificity-based differential argument marking pattern with peripheral agreement, like Delaware, Wampanoag, and Western Abenaki, a property that might initially suggest a pronominal clitic doubling analysis. There are

[32] Note that we can't use Béjar and Rezac (2009) and Coon and Keine's (2021) version of featural coarseness, which involves copying over all the features on the goal that *entail* the probe's specification. If number, obviation, and animacy features don't dominate the third person node, then those features wouldn't be copied over to C under this version of featural coarseness.

two arguments against this. The first is that differential argument marking in these languages seems to correlate with movement to a higher syntactic position (Bruening and Rackowski 2001, Xu 2021), which could then place DPs into a position that's accessible to peripheral agreement (Xu 2021, 2022), an observation I make use of in accounting for variation in peripheral agreement in clauses with multiple third persons across Algonquian in Chapter 10. The second is that there is no definiteness/specificity-based differential argument marking for subjects of intransitives–peripheral agreement will uniformly index these arguments, no matter whether they're definite/specific or indefinite/nonspecific (this is also true for external arguments of 3AN⟶SAP scenarios in Delaware). It's not clear how a pronominal clitic doubling analysis would be able to capture that fact, if pronominal clitics must obligatorily be referential (or bound). Strikingly, under a movement-based analysis, this fact can be made to fall out naturally if we assume that the highest argument within the VoiceP A-moves to a projection in the TP domain (e.g. following Bruening 2001b, 2009 for Passamaquoddy). This would force subjects of intransitives to always be in the domain of C, and thus they always have a chance to be be indexed by peripheral agreement, no matter their semantic status.

In sum, any 3yesP theory is able to account for the third person preference of peripheral agreement, as long as the proper assumptions about how Agree works are made—such as the ability to relativize probes to negative feature values (for Nevins 2007 and Harbour's 2016 feature systems), the availability of composite probes (for Harbour's 2016 feature system), and the idea that feature copying under Agree is featurally coarse (necessary in all cases). As far as I am aware, there is nothing *a priori* problematic about any of these assumptions, and a few of them (like composite probing) have independently been extensively argued for in the literature.

9.4.2 A good prediction of inanimates being specified for person

An interesting consequence of this analysis of peripheral agreement is that inanimate third persons must be specified for person—more specifically, third person. This is actually somewhat of a controversial point—it's relatively common in the generative Algonquianist literature to treat inanimates as lacking person features entirely (Lochbihler 2012, Oxford 2014, 2022, Hammerly 2020, 2023), an analysis that is in large part motivated by various kinds of hierarchy effects in Algonquian that place inanimates "in last place". In this section, I'd like to point out an interesting (and, crucially, correct) prediction of the person-fulness of inanimates. This prediction is based on Oxford's (2022) analysis of cross-Algonquian variation in the distribution of inverse marking in the conjunct mode—specifically, in the distribution of inverse marking in various 3⟶SAP scenarios (there is always inverse marking available across the family in 3⟶3 scenarios, both in the independent as well as the conjunct). I show that Oxford missed a conjunct 3⟶SAP inverse system in his survey—the one attested in contemporary Passamaquoddy—and his analysis unfortunately rules that system out. However, if we minimally modify his analysis so that inanimates are specified for person, then we generate exactly one additional kind of 3⟶SAP inverse system: exactly the one in contemporary Passamaquoddy that Oxford missed.

So let's first start by surveying part of the picture as set up by Oxford (2022). One kind of variation we see in the spread of inversing in conjunct 3⟶SAP forms is based on the features of the third person external argument: whether it's animate (3), inanimate (0), or an impersonal (X)—the unspecified actor form. In some languages, like conservative Wolastoqey as documented in the late 1970s (Sherwood 1983, 1986), none of these trigger inverse marking in the conjunct (illustrating just with 3⟶1SG forms for simplicity, though in all these cases the identity of the internal argument does not effect the overall pattern—something not true for many other Algonquian languages; see Oxford 2022 for more details):

(437) Conservative Wolastoqey: **no inverse** (Sherwood 1986: 282)

a. wicuhkem **-i** -k — 0⟶1SG: no inverse
help$_{TA}$ **-1OBJ** -0CJ
'if it helps me'

b. wicuhkem **-i** -mok — X⟶1SG: no inverse
help$_{TA}$ **-1OBJ** -XCJ
'if I am helped'

c. wicuhkem **-i** -t — 3⟶1SG: no inverse
help$_{TA}$ **-1OBJ** -3CJ
'if she helps me'

In contrast, in Meskwaki, the inverse has spread to 0⟶SAP forms (verbs inflected by me based on the paradigms in Goddard 1994a):

(438) Meskwaki: **inverse in 0⟶SAP** (Goddard 1994a: 203)

a. wâpam **-ekwi** -yân -i — 0⟶1SG: **inverse!**
see$_{TA}$ **-INV** -1SG.CJ -IND
'it sees me'

b. wâpam **-i** -k -i — X⟶1SG: no inverse
see$_{TA}$ **-1OBJ** -XCJ -IND
'I am seen'

c. wâpam **-i** -č -i — 3⟶1SG: no inverse
see$_{TA}$ **-1OBJ** -3CJ -IND
'she sees me'

In Southwestern Ojibwe (as well as several other dialects of Ojibwe and Cree), the inverse has spread to both 0⟶SAP as well as X⟶SAP forms:

(439) Southwestern Ojibwe: **inverse in 0⟶SAP and X⟶SAP** (Nichols 1980: 203)

a. waabam **-igo** -yaan — 0⟶1SG: **inverse!**
see$_{TA}$ **-INV** -1SG.CJ
'it sees me'

b. waabam **-igoo** -yaan — X⟶1SG: **inverse!**
see$_{TA}$ **-X.INV** -1SG.CJ
'I am seen'

c. waabam **-i** -t 3⟶1SG: no inverse
see$_{TA}$ **-1OBJ** -3CJ
'she sees me'

Finally, for some speakers of Parry Island Ojibwe, a dialect of Eastern Ojibwe (as well as some speakers of Mahican and Wampanoag), all of these forms are uniformly inverse, just like in the independent (note that this causes the 0⟶SAP and 3⟶SAP forms to be homophonous):

(440) Parry Island Ojibwe: **inverse in 0⟶SAP, X⟶SAP, and 3⟶SAP** (Rogers 1975: 134)

a. waabm **-igo** -yaan 0⟶1SG: **inverse!**
see$_{TA}$ **-INV** -1SG.CJ
'it sees me'

b. waabm **-igoo** -yaan X⟶1SG: **inverse!**
see$_{TA}$ **-X.INV** -1SG.CJ
'I am seen'

c. waabm **-igo** -yaan 3⟶1SG: **inverse!**
see$_{TA}$ **-INV** -1SG.CJ
'she sees me'

This is the extent of the variation surveyed by Oxford (2022) in sensitivity to the features of the external argument. We can see this variation summarized in Table 9.2 below, where × signifies a lack of inversing in that particular set of forms.

	Conservative Wolastoqey	Meskwaki	SW Ojibwe	Parry Island Ojibwe
0 ⟶ SAP	×	INV	INV	INV
X ⟶ SAP	×	×	INV	INV
3 ⟶ SAP	×	×	×	INV

Table 9.2: Cline of conjunct SAP inversing in Oxford (2022)

These languages form a staircase cline, which Oxford captures by varying the interaction and satisfaction conditions of the conjunct central agreement probe. He assumes the following featural specifications for inanimate, impersonal, and animate third persons:

(441) Oxford's (2022) featural specifications for third persons

a. 0: [φ]

b. X: [φ, AN]

c. 3: [φ, AN, Pers]

With these specifications, we can derive all and only these patterns surveyed, by specifying the interaction and satisfaction conditions in the following way: [INT:φ] in conservative Wolastoqey, capturing the fact that the conjunct central suffix can agree with any kind of third person external argument; [INT:AN] in Meskwaki, capturing the fact that the conjunct central suffix cannot agree with inanimate external arguments (causing inversing); [INT:Pers] in Southwestern Ojibwe, capturing the fact that the conjunct central suffix cannot agree with either inanimate or impersonal external argument; and finally [SAT:PART] in Parry Island Ojibwe, capturing the fact that the conjunct central suffix always prefers agreeing with SAPs over third persons.[33] It is important to notice that the feature specifications in (441) rule out a system where there is inversing only in the X⟶SAP scenario, as there is no feature shared by 0 and 3 that is not also found in X.

This is not a good result, as we get precisely this pattern in contemporary Passamaquoddy:

(442) Contemporary Passamaquoddy: **inverse in X⟶SAP**

a. ahsom **-i** -k[35] — 0⟶1SG: no inverse
feed$_{TA}$ **-1OBJ** -0CJ
'if it feeds me'

b. ahsom **-oki** -yan — X⟶1SG: **inverse!**
feed$_{TA}$ **-X.INV** -XCJ
'if I am fed'

c. ahsom **-i** -t — 3⟶1SG: no inverse
feed$_{TA}$ **-1OBJ** -3CJ
'if she feeds me'

Thus, Oxford's system underpredicts. The complete typology is presented below in Table 9.3, with the addition of the modern Passamaquoddy system. What to do?

	Conservative Wolastoqey	Meskwaki	Modern Passamaquoddy	SW Ojibwe	Parry Island Ojibwe
0 ⟶ SAP	×	INV	×	INV	INV
X ⟶ SAP	×	×	INV	INV	INV
3 ⟶ SAP	×	×	×	×	INV

Table 9.3: Cline of conjunct SAP inversing, complete

This is where our observation that inanimates *are* actually specified for person—in particular, third person—comes in. In a privative system, we would thus get the following featural specifications for the three kinds of third person (assuming that the external argument of the unspecified subject construction doesn't have person features[36]):

[33] We can't set the interaction condition for Parry Island Ojibwe to [INT:PART], as that would rule out conjunct central agreement from ever indexing third persons, which is false: it can index third persons, but only ever if there are *only* third person arguments. See Oxford (2022) for more details on how to we can exploit satisfaction conditions to derive probe preferences with equidistant goals.

[35] For many speakers the central suffix in the 0⟶1SG form can also be *-t*, by analogy with the 3⟶1SG form.

[36] This isn't entirely an innocent move—why should impersonal third persons lack person features entirely? I think there is independent evidence for this from the behavior of peripheral agreement. The fact to notice is that unspecified subjects can be plural in Passamaquoddy—something that can be seen in unspecified subject AI forms:

(443) Revised featural specifications for third persons

a. 0: [φ, Pers, 3]

b. X: [φ, AN]

c. 3: [φ, AN, Pers, 3]

In this system, 0 shares [Pers] with 3 but not X, whereas X shares [AN] with 3 but not 0. With this set of featural specifications, we can thus capture all the same data that Oxford's original system does,[37] but we add in just one more pattern: a probe specified [INT:Pers], which would derive inversing only in X⟶SAP forms.

This is a nice result. Our investigation of peripheral agreement forced us to accept that third person inanimates are specified for person, and once we lay out the consequences of this fact for Oxford's (2022) analysis of variation in inversing in SAP object conjunct forms across Algonquian, we predict the existence of just one more inverse system, one that Oxford missed in his survey—a conjunct inverse system that is in fact attested, the one in contemporary Passamaquoddy.

9.4.3 Predictions and further winnowing

It's not the goal of this chapter to present and argue for a specific analysis of the feature representation of person. Instead, the aim is more modest—to show how the third person preference of Algonquian peripheral agreement helps us adjudicate between 3noP and 3yesP. There are a number of different 3noP and 3yesP feature theories out there: I've just argued that we need to throw out the 3noP set, and keep the 3yesP set. Further winnowing of theories must be left to future work. However, it's worth considering at this point what kinds of predictions the different 3yesP theories make, and what kinds of data would be relevant for the winnowing. Here, I'll consider the predictions and consequences for agreement phenomena.

First, let's consider agreement phenomena, and what kinds of probe relativizations each feature system allows us. One notable property of Harbour's (2016) system, in contrast with Nevins's

(i) SG vs. PL X in Passamaquoddy

a. wol-ihpi-n
good-eat$_{\text{AI}}$-N
'one eats well'

b. wol-ihp-ulti-n
good-eat$_{\text{AI}}$-PL-N
'people eat well'

Thus, unspecified subjects have number features. However, note that the plural unspecified subject AI form in (443) lacks peripheral agreement entirely, though one might expect it to have a plural peripheral suffix (most likely proximate plural *-ok*). But, if peripheral agreement is specified for third person, and unspecified subjects lack person specifications entirely, this fact naturally falls out: unspecified subjects, lacking person, are invisible to the peripheral agreement probe entirely, correctly ruling out unattested forms like **wolihpultinok*.

Lastly, specifying X with [AN] allows us to account for the fact that unspecified subjects are always interpreted as animate (more specifically, human), as well as the fact that there are no II unspecified subject forms in Algonquian.

[37] To capture the Southwestern Ojibwe pattern, with inversing in 0⟶SAP and X⟶SAP but not 3⟶SAP, we'd need to change the interaction condition from just [INT:Pers] to conjunctive [INT:AN ∧ Pers] (or, alternatively, have the satisfaction condition be conjunctive [SAT:AN ∧ Pers]), but this is an inconsequential modification, as Oxford (2022) already allows for conjunctive probing.

(2007) and Bondarenko's (2020), is that there's no simple way to single out all SAPs. For Nevins, all SAPs are specified [+PART], and for Bondarenko, all SAPs are specified [PART]. However, the only way to for Harbour to pick out the class of SAPs is to have a disjunction of [+PART] and [+AUTH]. There are several languages that have probes specified for SAPs only (e.g. Chimariko, as mentioned in Section 9.1.2, among many others), so if one would like to adopt Harbour's system, then one would be forced to accept disjunctive interaction conditions, as proposed independently by Bondarenko and Zompì (2021).[38]

Privative feature theories are by and large the norm in the literature on probe-goal models of agreement (likely inspired in by the influential work by Béjar 2003, who used privative features). Thus, Bondarenko's (2020) privative feature system does the least "damage" to existing typological predictions: the only additional predictions it makes are the existence of third person probes (which exist, as we've seen). In contrast, if we adopt a binary feature system and allow probes relativized to negative features, we make some interesting predictions. Notably, under Nevins's (2007) and Harbour's (2016) systems, we predict the existence of [−AUTH] interaction and satisfaction conditions. [INT:−AUTH] would be a probe that omnivorously agrees with third or second persons, ignoring first persons, and [SAT:−AUTH] would be a probe that continues probing only if it has agreed with a first person. I am unaware of any omnivorous "second or third" ([INT:−AUTH]) agreement patterns.

However, interestingly, there might be languages that do have [SAT:−AUTH] satisfaction conditions. Specifically, some Bantu languages generally only allow agreement with one object—the exception being when the recipient of a ditransitive is first person (singular), in which case you can get two object markers on the verb (Marlo 2014, 2015, van der Wal 2022, Section 3.9). There is also a related pattern where two object markers are possible only if an object is first person singular *or* reflexive—I leave this pattern aside here. I refer the interested reader to Marlo (2014, 2015) and van der Wal (2022, Section 3.9) and references therein for more discussion.

In Lungu (Bantu, M14; Bickmore 2007) and Mongo (Bantu, C60; Hulstaert 1965), only if the recipient is first person (singular or plural) can you agree with two objects, and in Binza (Bantu, C321), Lulua (Bantu, L31b), Dengese (Bantu, C81), Punu (Bantu, B43), and Suku (Bantu, H32), only if the recipient is first person *singular* can you agree with two objects (Marlo 2014). I illustrate below with Nyaturu (Bantu, F32), even though Nyaturu has the "1SG or reflexive" pattern—this is because I have not been able to find relevant negative data for the languages with the 1(SG) pattern, only statements like "[a]ll other tested combinations of object markers other than those mentioned above [combinations with 1SG/PL recipients] were found to be either very marginal or completely ungrammatical" (Bickmore 2007: 30) for Lungu. Note below that the glosses '1' and '2' stand for noun classes, rather than person features—'1SM' stands for 'noun class 1 subject marker', and '2OM' stands for 'noun class 2 object marker'.

[38]See also Roversi (2020) on disjunctive satisfaction conditions, though the generalizations that motivated that analysis might not actually be correct, as discussed by Roversi (2022, Appendix B). Oxford (2022) also independently proposes disjunctive satisfaction conditions for Delaware and Mahican conjunct central agreement.

(444) a. *w-a-**va-kʊ**-tʊm-ɪ-aa.
1sm-pst-**2om-2sg.om**-send-appl-fv
Intended: 'He sent them to you.'

b. w-a-**va-n**-tʊm-ɪ-aa
1sm-pst-**2om-1sg.om**-send-appl-fv
'He sent them to me.' Nyaturu (Hualde 1989: 185)

In (444a), we are trying to express both the second person singular recipient and the animate plural (noun class 2) theme as object markers—this is impossible. In contrast, if we change the recipient to first person singular, as in (444b), then suddenly we can have two object markers.

If we assume that recipients c-command themes and that the object marker probe c-commands both objects, then this pattern looks like a [−auth] satisfaction condition: all persons except first person halt probing. Only first person recipients will allow the probe to continue collecting features. Thus, languages like Lungu and Mongo, where all first persons allow continued probing, could have an object marker probe specified [int:φ,sat:−auth]. In the languages where only first person singular allows continued probing (Binza, Lulua, Dengese, Punu, and Suku), we can note that both non-first persons as well as plurals halt probing—for these languages, we can have a disjunctive satisfaction condition [sat:−auth ∨ pl], resulting in an object marker probe specified [int:φ,sat:−auth ∨ pl].

However, if we allow disjunctive satisfaction, then Bondarenko's (2020) feature system would be able to capture this pattern as well—we would need to specify that the satisfaction condition is [sat:3 ∨ addr], as the disjunction of those features picks out second and third person to the exclusion of first.[39] This, while this prediction of the the two binary features systems we've seen is borne out, it can equally be captured under a privative system. Notably, however, [−auth] (or [3 ∨ addr]) satisfaction conditions cannot be replicated in Harley and Ritter's (2002) or Béjar's (2003) 3noP feature theories, as there is no way to uniquely pick out the combination of second and third person to the exclusion of first person, either with conjunctive or disjunctive specifications. Interestingly, this behavior is possible to capture in Ackema and Neeleman's (2013, 2018, 2019) 3noP system, where second and third person share a feature [dist] to the exclusion of first person. Thus, this data, while it does verify a prediction made by the 3yesP theories considered here, doesn't strictly help us decide between 3yesP or 3noP.

A perhaps troubling prediction of Harbour's (2016) system, which is not predicted by the other two, is the existence of [−part] interaction and satisfaction conditions (recall that [−part], for Harbour, characterizes third person as well as first person exclusive). Thus, we predict [int:−part], a probe that omnivorously seeks out third persons or exclusive first persons, as well as [sat:−part], a probe that is halted by third person or by first person exclusive. Interestingly, there is no way to disjunctively (and/or conjunctively) specify a probe for that combination of persons in either of Nevins's (2007) or Bondarenko's (2020) systems without also ruling in first person inclusive. I am not aware of any languages with these kinds of agreement patterns, and to the extent that this is a principled gap, this would constitute an argument against Harbour's (2016) theory of person features.

Finally, adding a third person feature makes predictions about the typology of PCC effects. In

[39]It also rules in first person inclusive, but Bantu languages (as far as I am aware) do not distinguish exclusive from inclusive first person.

fact, van Alem (2023) uses the typology of PCC effects as an argument against 3yesP. However, there are an enormous range of extant analyses of the PCC, which take for granted different kinds of feature theories (e.g. Anagnostopoulou 2003, 2005, Béjar and Rezac 2003, Nevins 2007, Coon and Keine 2021, Deal 2022, a.m.o., which is only a small slice of the vast PCC literature). Notably, Nevins (2007) provides an account of various PCC effects using a 3yesP theory—thus, 3noP does not have a monopoly on the PCC. Giving full justice to the consequences of 3yesP on the PCC would bring us too far afield—I leave this topic aside for further work. It is worth noting though that adding just a privative [3] feature (as in Bondarenko's 2020 system) to the account of the PCC proposed by Coon and Keine (2021) predicts the existence of a reverse Weak PCC (*SAP→3), which exists in Washo (Arregi and Hanink 2022a). For these reasons, I don't think the typology of PCC effects can be an argument in favor of 3noP, contra van Alem (2023).

9.4.4 Defaultness

The final topic I wish to discuss is the defaultness of third person. It is often noted—rightly, I think—that third person occupies some kind of default status in language. In contexts that seem to lack person features entirely, like expletives and the realization of failed agreement/default agreement, the result is always a third person form. Notably, 3noP, the idea that third person is underspecified, offers a natural account of third person's defaultness: in contexts that lack person features, we can only insert exponents that are not specified for person (or any other φ features), and unspecified exponents are definitionally third person.

While underspecification is an intuitive and insightful way to analyze defaultness effects, it's not the only formal tool we can play with. This conclusion has been richly explored in the phonological literature on markedness (e.g. Calabrese 1995; de Lacy 2006; a.m.o.)—see also the discussion by Nevins (2007) in the domain of person features. Given that, the defaultness of third person is not as strong an argument for 3noP as it might seem. In this section, I'd like to consider a two other potential accounts of third person defaultness: negative feature values as a default, and appealing to the semantics of person.

A basic and easily implementable analysis of third person defaultness is to say that negative values of binary features are default. To implement this idea for third person, we can say that, when the syntax has provided the morphology with a node that lacks person features entirely (perhaps due to expletives or default/failed agreement), we insert [−PART, −AUTH] as a default rule—this would then feed exponent choice. This kind of rule would simply have to be stipulated, and thus one might worry about its explanatory accuracy. Note that Preminger (2019a) also stipulates this kind of rule in order to convert underspecified, privative syntactic representations of person to binary representations for the morphology. Default negative values wouldn't be possible in a privative 3yesP theory, however (unless one would like to stipulate that the feature [3] is inserted by default).

Alternatively, following the lead of Ackema and Neeleman (2013, 2018, 2019), we could appeal to the semantics of person. The idea is that first and second person have a semantics associated with them—first person picks out the author of the context, and second person picks out the addressee of the context. In contrast, we can say that third person features don't impose any semantic constraints—this would correctly capture that fact that the author and addressee of the context can in some cases be contained in the reference of third person expressions, either in generalizing expressions like *all people*, or in special sociolinguistic contexts where formally third person expressions are used to refer to author or addressee, like *your majesty* when talking to royalty, or *mommy* when a mother talks to her young children. If you have a true default context, like expletives or failed agreement, you can't be referring to the author or addresse of the context—thus, you can't insert first or second person features, as that would result in semantic nonsense. Only third person would be semantically compatible with these kinds of contexts.

To analyze the case of failed agreement, this proposal would have to assume that person features on probes are interpreted, in order to prevent inserting first or second person features/ exponents onto a probe. This idea is contrary to much popular intuition (see Rezac 2016 for discussion). Additionally, in order to flesh this idea out, we would also need to ensure that person features on a probe are interpreted relative to the same referent as the goal they came from. The need for this is especially pressing for agreement markers that can index arguments in multiple different syntactic positions, like central and peripheral agreement in Algonquian.

I think there's an interesting way to do this which borrows from the literature that argues that indices are syntactically represented (Rezac 2004, Elbourne 2005, 2008, Schwarz 2009, Hanink 2021, a.o.) and, moreover, that indices can be copied in agreement (Rezac 2004, Clem 2022, Arregi and Hanink 2022b). If indices are syntactically represented and can be copied in agreement, and if agreement is featurally coarse, that means that every instance of Agree involves copying the index of the goal onto the probe. Then, if both indices and φ features are interpreted on probes, this would predict that any semantics conflict between them should be ruled out—for instance, a second person feature would be incompatible with an index on the same feature bundle on the probe that points to an entity other than the addressee. This would allow us to capture the defaultness of third person in failed agreement as the semantic impossibility of SAP features appearing in a feature bundle that lacks any sort of reference, exactly as required.

Additionally, this (admittedly somewhat tentative) proposal allows a natural explanation of Kinyalolo's Constraint effects, which we've seen in Algonquian between Voice and Infl (deriving inverse marking), as well as between Infl and C (deriving umlauting -*ẅ*). As Oxford (2020a) notes, the crucial fact about Kinyalolo's Constraint is that it's really about agreement *with the same goal*, not just identical φ features. This can very clearly be seen in OBV⟶OBV scenarios, where Voice and Infl would both have the same φ features, yet this doesn't (obligatorily) trigger inverse marking, and Infl and C would also have the same φ features, yet we don't get -*ẅ*. I illustrate below with Southwestern Ojibwe (using a dubitative verb form, as it's more morphologically straightforward for this configuration of arguments):

(445) o-waabam-aa-nini-dogen-an
3-see$_{\text{TA}}$-3OBJ-OBV-DUB-OBV
'she$_{\text{OBV}}$ must be seeing her$_{\text{OBV}}$' Southwestern Ojibwe (Nichols 1980: 291)

As all the arguments here are identical in φ features—they're all animate, third person, obviative, and singular—all of the agreement slots on this verb should have the same φ features. Yet we get no dissimilatory Impoverishment: we have normal object agreement -*aa* '3OBJ' in Voice, normal central agreement *o-...-nini* '3-...-OBV' indexing the obviative external argument in Infl, and normal peripheral agreement -*an* 'OBV' in C indexing the obviative internal argument.

How do we capture the fact that dissimilatory Impoverishment only occurs if the adjacent heads have agreed with the same goal, not when they have the same φ featural content? Under standard assumptions, it really isn't obvious how to do this. However, if indices are copied over as part of the featural coarseness of Agree, then a natural explanation presents itself. Dissimilatory Impoverishment happens when adjacent probes are featurally identical, *including indices*. The reason we don't get any dissimilatory Impoverishment in (445) is that the external argument and internal argument have distinct indices—therefore, the probes on Voice and Infl differ in terms of the indices that they've copied (but not their φ features), and the probes on Infl and C also differ in terms of the indicies that they've copied (but not their φ features).

Kinyalolo's Constraint can be thus used as an argument for the featural coarseness of Agree as well as for the idea that indices are syntactically represented and can be copied in Agree relations. If this is independently necessary, then it isn't a big step to say that person features *as well as indices* are interpreted on probes, and it's then possible to use this as an explanation for the defaultness of third person.

For my purposes here, though, it doesn't matter what the right analysis of third person defaultness is. I just want to show that there are very reasonable alternatives to underspecification, like default negative values of binary features, or the idea that person features are interpreted on probes. The real prediction that 3noP makes is that third person is impossible to target in morphosyntactic processes, and this prediction is false even in the syntax, as there are probes that must be specified for third person—namely, C, the peripheral suffix, across all of Algonquian.

Chapter 10

Lowest preference

In the previous chapter, we've seen how peripheral agreement across Algonquian shows third person preference, examining scenarios with only one third person. The striking observation was that the peripheral suffix always indexes that third person argument, no matter its syntactic role. I then argued that this pattern must be analyzed as a probe specified for third person—thus, third person must have its own distinct specified featural representation, targetable in the syntax.

In this chapter, we'll broaden our empirical focus to scenarios with multiple third persons: 3⟶3 monotransitives (both direct and inverse) as well as ditransitives. The empirical goal is to show that there is quite a bit of (constrained) variation across the family, building off of Xu (2022). There are those languages, like Blackfoot, in which C simply agrees with the highest third person—the Highest languages. Then there are those languages, like Ojibwe, Passamaquoddy, and Wampanoag, where in general C agrees with the *lowest* third person—the Lowest languages. Lowest preference in agreement is highly unusual, given the observation that agreement is generally local and subject to Minimality. Among the Lowest languages, there is variation between three groups of languages: those in which themes of ditransitives are invisible to C (Ojibwe), those in which themes of ditransitives *are* visible to C (Passamaquoddy), and those that have a definiteness/specificity based differential argument marking pattern (Wampanoag).

The theoretical goal is to motivate a *morphological* pathway to deriving lowest preference, where the surface appearance of agreement with the least local goal is derived by agreement with *every* goal, but exponence of only the last set of features collected, following a suggestion by Emily Clem (p.c.) and Amy Rose Deal (p.c.). This is simply the agreement equivalent of a similar possible morphological resolution of multiple case assignment, where only the last case assigned is spelled out—I'll call this general morphological outcome Expone Outermost, as suggested by Amy Rose Deal. Thus, there is actually nothing particularly special about the Lowest languages—they are simply what we get when we combine two pre-existing parametric options: multiple agreement and Expone Outermost. I argue that this successfully derives all the behaviors of lowest preference in Algonquian, in contrast to previous analyses of lowest preference, like case discrimination combined with ergative case, a low probe, and syntactic inversion. I then show how we can capture the variation across the Lowest languages as variation in object shift, paralleling similar proposals for variation in object shift in Germanic (Holmberg 1986, Diesing 1992, 1996, Thráinsson 2001, a.m.o.) and variation in ergative patterning in Inuit (Woolford 2017, Yuan 2022). Finally, I conclude by discussing the typological implications of this proposal, and argue that the typological predictions it makes are largely borne out.

10.1 Theoretical background

But let's begin with some theoretical background, so we can clearly see exactly why lowest preference is so problematic. The basic idea is this: there is good reason to think that many kinds of syntactic phenomena are subject to a kind of locality that can be described in terms of *minimality* (see also the SUPERIORITY CONDITION from Chomsky 1973, as well as the principle of RELATIVIZED MINIMALITY from Rizzi 1990), which we can define in the following way:

(446) **Minimality property**

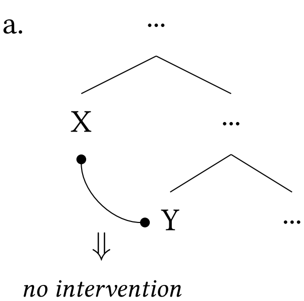
X can establish a syntactic dependency with Y iff there is no Z such that:

a. X can potentially establish a syntactic dependency with Z; and

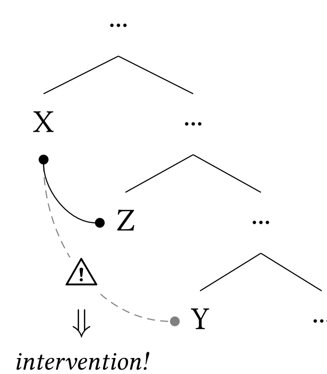
b. Z is closer[1] to X than Y is. *(e.g. Z c-commands Y)*

In other words, syntactic dependencies of various kinds are subject to INTERVENTION EFFECTS, where a closer potential target Z for a syntactic dependency intervenes and prevents the formation of a syntactic dependency with a target Y further away, as illustrated below:

(447) a.



b.



In (447a), there is no closer target for some syntactic dependency linking X and Y, and it can successfully go through. In contrast, in (447b), there is a closer target Z that intervenes in the formation of the relevant dependency, and Y can no longer be a target—it is now too far away.

This logic is by no means new. But, in order to set up the discussion coming up ahead, I think it's worth really establishing that Minimality and intervention effects are a deep and fundamental property of syntactic dependencies of various kinds. In the remainder of this section, I'd like to review the existing literature to show that in the domains of Ā movement (specifically *wh* movement) and A movement, we really only see the following kinds of patterns: *(i)* only the closest target can move; or *(ii)* all targets move. Strikingly, we never get *anti*-Minimality effects, where only the *least* local target moves. Then, I'll move on to the domain of φ agreement, where it *is* in fact possible to find anti-Minimality effects (one example of which, peripheral agreement in Passamaquoddy, is the core topic of this chapter). Under the assumption that movement and φ agreement are triggered by the same syntactic mechanism, Agree (Chomsky 2000, 2001, Carstens 2005, Deal 2023 a.m.o.), this is extremely puzzling: why should movement be so robustly subject

[1]For our purposes, it's not crucial how exactly we define 'closer'—we can just assume a simple c-command based definition, as suggested here. Alternatively, we could define it based on a tree search algorithm—see Ke (2019), Branan and Erlewine (2022), among others.

to Minimality and φ agreement seem to be able to flout it? Given that the logic of Minimality seems deeply ingrained in natural language syntax, how should we derive anti-Minimality effects in φ agreement, and is there reason to preserve Minimality-based locality in φ agreement?

10.1.1 Minimality in Ā movement

A classic example of Minimality comes from Superiority effects with *wh* movement in English (Kuno and Robinson 1972, Chomsky 1973, a.m.o.), where in multiple *wh* questions only the highest one can move (at least overtly, and setting aside so-called D-LINKED *wh* phrases—see discussion by Pesetsky 1987, 2000 and Kotek 2018, a.o.; gray text in angle brackets marks lower copies of movement dependencies):

(448) a. **Who** do you think ⟨who⟩ stole the jewels?

b. **What** do you think the burglars stole ⟨what⟩?

c. **Who** do you think ⟨who⟩ stole **what**?

d. ***What** do you think **who** stole ⟨what⟩?

The observation is that, even though it's independently possible to move either the embedded subject or object in a single *wh* question (448a,b), when both embedded subject and object are *wh* items with matrix scope, you can only (overtly) move the embedded subject (448c), and not the embedded object (448d).

We find similar behavior in Western Naskapi, where multiple *wh* questions also obey Superiority in a similar way (Brittain 2001: §4.1.1):[2]

(449) a. **Awân** ⟨awân⟩ kâ= iyâ-t **châkwân-iyuw**?
who IC.PST= buy$_{\mathrm{AI+O}}$-3CJ **what-IN.OBV.SG**
'**Who** bought **what**?'

b. ***Châkwân-iyuw** **awân** kâ= iyâ-t ⟨châkwâniyuw⟩?
what-IN.OBV.SG **who** IC.PST= buy$_{\mathrm{AI+O}}$-3CJ
*'**What** did **who** buy?' Western Naskapi (Brittain 2001: 159, 163)

These are examples of intervention effects. In (448d), the embedded subject *who* is closer to the matrix (*wh*) question complementizer $C_{[wh]}$ than the embedded object *what*. Thus, it counts as an intervener for the movement process triggered by $C_{[wh]}$, so we can only move the higher of the two *wh* phrases. Similar logic regulates the the movement possibilities of *awân* 'who' and *châkwâniyuw* 'what$_{\mathrm{OBV}}$' in (449).

[2]It's also possible to front both subject and object, preserving subject-object order:

(i) **Awân** **châkwân-iyuw** kâ= iyâ-t?
who **what-IN.OBV.SG** IC.PST= buy$_{\mathrm{AI+O}}$-3CJ
'**Who** bought **what**?' Western Naskapi (Brittain 2001: 159)

But it's unclear whether this is true multiple *wh* fronting to multiple specifiers of CP, or whether the object has scrambled to a clause-medial, preverbal position (which is independently possible). Brittain (2001) does not discuss this issue.

Of course, not all languages are restricted to single (overt) *wh* movement—some languages require multiple *wh* movement, like Bulgarian (Rudin 1988, Richards 1997, a.m.o.) and Mi'gmaq (Hamilton 2013, 2015b: §3.2):

(450) a. **Koj** **kŭde** misliš če e otišul ⟨koj⟩ ⟨kŭde⟩?
who **where** think.IPFV.2SG C be.3SG gone
'**Who** do you think went **where**?'

b. ***Koj** misliš če e otišul ⟨koj⟩ **kŭde**?
who think.IPFV.2SG C be.3SG gone **where**
Intended: '**Who** do you think went **where**?'

c. ***Kŭde** misliš če e otišul **koj** ⟨kŭde⟩?
where think.IPFV.2SG C be.3SG gone **who**
*'**Where** do you think who went?' Bulgarian (Rudin 1988: 450)

(451) a. **Wen** **goqwei** pegisito-q-s'p ⟨wen⟩ ⟨goqwei⟩?
who **what** bring$_{\mathrm{TI}}$-3-DUB
'**Who** brought **what**?'

b. ***Wen** pegisito-q-s'p ⟨wen⟩ **goqwei**?
who bring$_{\mathrm{TI}}$-3-DUB **what**
Intended: '**Who** brought **what**?'[3] Mi'gmaq (Hamilton 2015b: 27)

In these matrix double *wh* questions, only the (a) examples are possible—the ones where both *wh* phrases end up at the left edge of the matrix clause. If we try to leave one *wh* phrase *in situ*, then the result is ungrammatical.

Interestingly, in these languages the order of the moved *wh* phrases must preserve their base-generated c-command relationships—thus, for instance, external arguments must precede internal arguments:

(452) a. **Koj** **kogo** vižda ⟨koj⟩ ⟨kogo⟩?
who.NOM **who.ACC** see.IPFV.3SG
'**Who** sees **who**?'

b. ***Kogo** **koj** vižda ⟨koj⟩ ⟨kogo⟩?
who.ACC **who.NOM** see.IPFV.3SG
*'**Who** did **who** see?' Bulgarian (Rudin 1988: 472–473)

[3] This string is only ungrammatical under the intended multiple *wh* question reading. It's grammatical under a single *wh* question reading, with *goqwei* getting a plain indefinite interpretation, i.e. 'Who brought something?', as Mi'gmaq *wh* items are quexistentials

(453) a. **Wen goqwei** pegisito-q-s'p ⟨wen⟩ ⟨goqwei⟩?
who what bring$_{\text{TI}}$-3-DUB
'**Who** brought **what**?'

b. ***Goqwei wen** pegisito-q-s'p ⟨wen⟩ ⟨goqwei⟩?
what who bring$_{\text{TI}}$-3-DUB
*'**What** did **who** bring?' Mi'gmaq (Hamilton 2015b: 27)

This has been interpreted as an alternative guise of the same kind of Superiority effect, and has motivated analyses where first the highest *wh* phrase moves (as it's closest to $C_{[wh]}$), and then the lower *wh* phrase moves, "tucking in" under the first (e.g. Richards 1997, a.o.). The ungrammaticality of the (b) examples above, then, can also (in part) be attributed to a kind of intervention effect, and thus multiple *wh* movement in Bulgarian and Mi'gmaq also obeys Minimality.

This by no means exhausts all the typological possibilities of multiple *wh* movement we find crosslinguistically—for instance, there are languages that don't seem to show Superiority effects, like Serbo-Croatian, Czech, Russian, and Polish (Rudin 1988, Richards 1997, Bošković 1997, 2002, 2007, a.m.o.). And even among this class there is variation—in some languages, like Serbo-Croatian, Superiority effects pop back up in certain contexts, like long-distance *wh* movement (Bošković 1997, 2002), whereas in others, like Russian, they don't (Stepanov 1998, Bošković 2002). This isn't the right dissertation to go into this subject in full depth—I refer the interested reader to these works and citations therein.

The main point I wish to make is that there are two broad kinds of patterns we see in *wh* movement: *(i)* only one *wh* item may move—the one closest to $C_{[wh]}$ (e.g. as in English and maybe Western Naskapi); and *(ii)* all *wh* items must move, potentially showing Superiority effects in various guises (e.g. as in Bulgarian and Mi'gmaq). But as far as I am aware, there are no languages that have *anti*-Minimality effects. This would be a language where the *furthest wh* phrase from $C_{[wh]}$ is the only one that can (overtly) move, or a multiple *wh* movement language where the order of the *wh* items is always reversed, as illustrated below with schematic faux-English examples:[4]

(454) Unattested anti-Superiority effect 1

a. **What** do you think **who** stole ⟨what⟩?

b. ***Who** do you think ⟨who⟩ stole **what**?

[4]The only case I am aware of that look like an anti-Superiority effect is the behavior of multiple *wh* questions in Moken (Austronesian), as discussed by Baclawski and Jenks (2016):

(i) a. *Aca:=la: ano:=la: mane?
who=Q what=Q ask
Intended: 'Who asked what?'

b. Ano:=la: aca:=la: mane?
what=Q who=Q ask
'Who asked what?' Moken (Baclawski and Jenks 2016: 82)

However, Baclawski and Jenks (2016) argue that Moken doesn't do true *wh* movement, but rather base-generates the *wh* phrases at the CP edge, binding null pronouns in argument positions, and they seek instead to derive the contrast above from a constraint on crossed binding dependencies. The strongest argument they levy in favor of this conclusion is the fact that Moken *wh* "movement" doesn't obey islands, and hence isn't derived by Ā movement.

(455) Unattested anti-Superiority effect 2

a. **What who** do you think ⟨who⟩ stole ⟨what⟩?

b. *__Who what__ do you think ⟨who⟩ stole ⟨what⟩?

The striking lack of anti-Superiority effects combined with the surprising robustness of Superiority effects even in several multiple *wh* fronting languages constitutes a strong argument that Minimality is constraint on Ā movement dependencies (at least *wh* movement).

10.1.2 Minimality in A movement

A movement is another domain in which we find Minimality effects. A classic set of examples from English concerns movement to subject position (i.e. A movement to Spec,TP): only the highest DP argument within the domain can move to subject position.

(456) Only external arguments can move to Spec,TP

a. Luna has ⟨Luna⟩ stolen the bag.

b. *The bag has Luna stolen ⟨the bag⟩.

(457) Only the highest object can passivize (in most varieties of English)

a. Luna was given ⟨Luna⟩ catnip.

b. *Catnip was given Luna ⟨catnip⟩.

(458) Only embedded subjects can raise

a. Luna is likely [⟨Luna⟩ to eat the treat].

b. *The treat is likely [Luna to eat ⟨the treat⟩].

Similar effects can be found in numerous languages. For instance, there are Algonquian languages with Minimality effects in cross-clausal raising to subject configurations, like Blackfoot (Frantz 1980) and Western Naskapi (Brittain 2001: §6.7):

(459) Only embedded subjects can raise to subject in Blackfoot

a. **Kits**-íksipisata'pssi *pro*$_{2SG}$ [⟨*pro*$_{2SG}$⟩ kít-sspomo-a-hsi n-óko's-iksi].
2-be.surprising$_{AI}$ 2-help$_{TA}$-3OBJ-CONJ 1-kid-PL
'It's surprising that you helped my kids.'

b. *Iksípisata'pssi-**yi** n-óko's-iksi [*pro*$_{2SG}$ kít-sspomo-a-hs=aawa ⟨n-óko's-iksi⟩].
be.surprising$_{AI}$-**PL** 1-kid-PL 2-help$_{TA}$-3OBJ-CONJ=PRN
Intended: 'It's surprising that you helped my kids.' Blackfoot (Frantz 1980: 294)

(460) Only embedded subjects can raise to subject in Western Naskapi

a. **Chit**-itâyihtâkusi-**n** *pro*$_{2SG}$ [â= chischâyim-i-yin ⟨*pro*$_{2SG}$⟩ *pro*$_{1SG}$].
2-seem$_{AI}$-**PART.SG** E= know$_{TA}$-1OBJ-2SG.CJ
'You seem ⟨you⟩ to know me.'

b. * **Nit**-itâyihtâkusi-**n** *pro*$_{1SG}$ [â= chischâyim-i-yin *pro*$_{2SG}$ ⟨*pro*$_{1SG}$⟩].
1-seem$_{AI}$-**PART.SG** E= know$_{TA}$-1OBJ-2SG.CJ
* 'I seem you to know ⟨me⟩.' Western Naskapi (Brittain 2001: 272)

These languages behave just like English in cross-clausal raising to subject configurations: only the highest argument in the embedded clause can raise.

There are some apparent counterexamples to this—but on further inspection, it's likely that these involve Ā movement rather than A movement. For example, in Moose Cree, we don't get (obvious) Minimality effects in (what look like) raising to subject structures—you can raise either the embedded subject or object:

(461) Both embedded subject and object can raise to subject in Moose Cree

a. **Kit**-itêlihtâkosi-**n** *pro*$_{2SG}$ [ê= kiskêlim-i-yan ⟨*pro*$_{2SG}$⟩ *pro*$_{1SG}$].
2-seem$_{AI}$-**PART.SG** E= know$_{TA}$-1OBJ-2SG.CJ
'You seem ⟨you⟩ to know me.'

b. **Nit**-itêlihtâkosi-**n** *pro*$_{1SG}$ [ê= kiskêlim-i-yan *pro*$_{2SG}$ ⟨*pro*$_{1SG}$⟩].
1-seem$_{AI}$-**PART.SG** E= know$_{TA}$-1OBJ-2SG.CJ
'I seem you to know ⟨me⟩.' Moose Cree (James 1984: 209)

These sentences, which are the exact cognates of the Western Naskapi sentences in (460), demonstrate the striking contrast between the two closely related languages.

But note that it's possible to raise to subject across multiple clause boundaries in Moose Cree:

(462) Itêlihtâkosi-**w** Mêri [ê= kî= alamotamâ-t-ân [ê= âhkosi-t ⟨Mêri⟩]].
seem$_{AI}$-**3** Mary E= PST= tell$_{TA}$-2OBJ-1SG.CJ E= sick$_{AI}$-3CJ
'Mary it seems I told you ⟨Mary⟩ is sick.' Moose Cree (James 1984: 210)

James (1984) also shows that this construction really does involve movement—for instance, she demonstrates that it obeys various islands, like the Complex NP Constraint, the Coordinate Structure Constraint, and *wh* islands. The ability for this kind of raising to occur across clause boundaries is a classic property of Ā movement—thus, it might actually be that Moose Cree raising to subject is Ā movement, not A movement (see also Bruening 2001b, Polinsky and Potsdam 2001, Branigan and MacKenzie 2002 on Ā movement feeding cross-clausal A dependencies; see also Deal 2017 on scrambling feeding cross-clausal A movement). Thus, Moose Cree (most likely) isn't a counterexample to the generalization that A movement obeys Minimality.

We find a similar contrast in the domain of passives of ditransitives between languages that show Minimality effects in A movement versus languages that don't seem to. There are ASYMMETRIC PASSIVE languages, where only the highest object can passivize, and there are SYMMETRIC PASSIVE languages, where either of the objects can passivize. To illustrate, we can compare two Bantu languages, Ngoni (Bantu, N12) and Zulu (Bantu, S42):

(463) Asymmetric passive in Ngoni

a.

M-geni	**a**-kamul-i-**w**-i	⟨mgeni⟩	mene.
1-guest	**1sm**-hold-appl-**pass**-pfv		9.goat

'The guest had a goat held for him.'

b.

*Mene	**ya**-kamul-i-**w**-i	m-geni	⟨mene⟩.
9.goat	**9sm**-hold-appl-**pass**-pfv	1-guest	

Intended: 'The goat was held for the guest.' Ngoni (Ngonyani and Githinji 2006: 38)

(464) Symmetric passive in Zulu

a.

Aba-ntwana	**b**-a-fund-el-**w**-a	⟨abantwana⟩	incwadi.
2-child	**2sm**-rem.pst-read-appl-**pass**-fv		9-book

'The children were read a book.'

b.

In-cwadi	**y**-a-fund-el-**w**-a	aba-ntwana	⟨incwadi⟩.
9-book	**9sm**-rem.pst-read-appl-**pass**-fv	2-child	

'The book was read for the children.' Zulu (Adams 2010: 11)

In Ngoni, only the recipient can passivize, whereas in Zulu either object can become the derived subject of a passive. The contrast between asymetric and symmetric passives is a point of very interesting crosslinguistic variation and has been a topic of much research, especially in Bantu—see, among (many) others, Bresnan and Moshi (1990), Woolford (1993), Ngonyani and Githinji (2006), Baker et al. (2012), van der Wal (2017), Holmberg et al. (2019). While it might seem like symmetric passive languages don't obey Minimality in A movement, closer investigation suggests that theme passives are actually fed by an intermediate shorter step of movement that places the theme higher than the recipient, thus making the theme the new most local target to T (McGinnis 1998, 2001, Anagnostopoulou 2003, Holmberg et al. 2019, a.m.o.). Thus, just like in the domain of cross-clausal raising to subject, apparent violations of Minimality in A movement don't actually seem to be true violations upon further inspection.

Finally, one might wonder if there are any instances of multiple A movement akin to the examples of multiple *wh* movement we have seen—and, if so, do we find any analogues of Superiority effects in these constructions? I am not aware of much discussion of this issue (though see Richards 1997), but there is at least one potential example of multiple A movement out there in the literature: the phenomenon of Scandinavian object shift. Across Scandinavian, we find that certain kinds of objects—which kinds of objects is a core point of variation—are able to (or are required to) move to a high pre-negation position somewhere between TP and VP. First, it's possible that object shift is A movement, as it doesn't license parasitic gaps:

(465) Object shift doesn't license parasitic gaps

a.

*Alle	stillede	**den**$_i$	straks	⟨den⟩	hen	på	reol-en	[	uden	at	læse e_i
all.pl	put.pst	**it**	at.once		to	on	bookshelf-def		without	to	read

først	].
first	

Intended: 'Everyone put it onto the bookshelf at once without reading it first.'
Danish (Vikner 2017: 11)

b.	*Jag	kastade	**den**$_i$	inte	⟨den⟩	[innan	jag	hade	läst	e_i].
	I	threw	**it**	NEG		before	I	had	read	

Intended: 'I threw it away before I had read it.'

Swedish (Holmberg and Platzack 1995: 146)

Thus, object shift is a relevant place to look for instances of multiple A movement.[5]

The observation for ditransitives is that it's possible for neither object to shift, for both objects to shift, or for just the recipient to shift—but it is impossible for only the theme to shift:

(466)	a.	Ég	skila-ði			ekki	manninum	bókinni.
		I	return-PST.1SG			NEG	man.DAT.DEF	book.DAT.DEF
	b.	Ég	skila-ði	**manninum**	**bókinni**	ekki	⟨manninum⟩	⟨bókinni⟩.
		I	return-PST.1SG	**man.DAT.DEF**	**book.DAT.DEF**	NEG		
	c.	Ég	skila-ði	**manninum**		ekki	⟨manninum⟩	bókinni.
		I	return-PST.1SG	**man.DAT.DEF**		NEG		book.DAT.DEF

All: 'I didn't return the book to the man.'

	d.	*Ég	skila-ði		**bókinni**	ekki	manninum	⟨bókinni⟩.
		I	return-PST.1SG		**book.DAT.DEF**	NEG	man.DAT.DEF	

Intended: 'I didn't return the book to the man.' Icelandic (Thráinsson 2001: 168)

Additionally, when both objects shift, they must preserve the recipient-theme order:[6]

(467)	a.	Ég	lána	**Maríu**	**bækurnar**	ekki	⟨Maríu⟩	⟨bækurnar⟩.
		I	lend.PRS.1SG	**Maria.DAT**	**book.ACC.PL.DEF**	NEG		

'I do not lend Maria the books.'

	b.	*Ég	lána	**bækurnar**	**Maríu**	ekki	⟨Maríu⟩	⟨bækurnar⟩.
		I	lend.PRS.1SG	**book.ACC.PL.DEF**	**Maria.DAT**	NEG		

Intended: 'I do not lend Maria the books.'

Icelandic (Collins and Thráinsson 1996: 406, 409)

[5]Interestingly, object shift shows at least one non-A property: it doesn't feed anaphor binding. For instance, a shifted object cannot bind a reciprocal from its shifted position, in contrast to passivization:

(i)	a.	*Han	ansåg	**dem**$_i$	till	varandra-s$_i$	besvikelse	[	⟨dem⟩	vara	lika	bra].
		he	considered	**them**	to	each.other-GEN	disappointment			be	equally	good

*'He considered **them**$_i$ to each other's$_i$ disappointment to be equally good.'

b.	**De**$_i$	ansåg-s	till	varandra-s$_i$	besvikelse	[	⟨de⟩	vara	lika	bra].
	they	considered-PASS	to	each.other-GEN	disappointment			be	equally	good

'**They**$_i$ were considered to each other's$_i$ disappointment to be equally good.'

Swedish (Holmberg and Platzack 1995: 148)

I am not sure what to make of this fact—see Holmberg and Platzack (1995) for discussion.

[6]There are certain exceptions to this, having to do with the availability of postverbal theme-recipient order as well as sentential stress/focus. See Collins and Thráinsson (1996) and Haddican and Holmberg (2019) for discussion.

This is exactly parallel to the kind of order-preserving Superiority effect found in Bulgarian multiple *wh* movement.[7] I am not aware of any Scandinavian language with an anti-Minimality effect in object shift with ditransitives—i.e. being unable to only shift the recipient.

In sum: the empirical picture with A movement seems remarkably similar to the one found with Ā movement: there are numerous examples of Minimality effects with movement of a single constituent (e.g. English Superiority effects with *wh* movement, raising to subject in English, Blackfoot, and Western Naskapi, asymmetric passives in Ngoni, Scandinavian single object shift), as well as with multiple movement (e.g. Bulgarian Superiority effects, Scandinavian multiple object shift). Additionally, examples of a seeming lack of Minimality effects entirely (e.g. Moose Cree raising to subject, Zulu symmetric passives) seem to be due to a confluence of independent syntactic factors feeding the locality of movement (e.g. Ā movement, short theme movement). In the domain of movement, both A and Ā, Minimality reigns supreme.

10.1.3 Minimality in φ agreement

When we turn to the domain of φ agreement, the picture is quite different, where we can find a striking number of apparent Minimality violations across a wide variety of languages. But first, there are many cases where Minimality *is* obeyed in φ agreement. For instance, in languages like English and Spanish, T will agree with the highest argument—that is, the subject:

(468) Minimality in T agreement in English

a. Agnes always feed-**s** the cats.

b. *Agnes always feed-**Ø** the cats.

(469) Minimality in T agreement in Spanish

a. Remus acarici-**ó** a l-os gat-os.
Remus pet-**PFV.PST.3SG** DOM the-M.PL cat-M.PL
'Remus pet the cats.'

b. *Remus acarici-**aron** a l-os gat-os.
Remus pet-**PFV.PST.3PL** DOM the-M.PL cat-M.PL
Intended: 'Remus pet the cats.'

In both these examples, T can only agree with the singular subject (a), and not the plural object (b). This is a Minimality effect in φ agreement, as the subject is a closer agreement target to T than the object.

Additionally, it's also possible for a single head to agree with all φ-bearing constituents within its c-command domain—a pattern parallel to multiple *wh* movement or multiple object shift. We

[7] It's worth noting that there are influential analyses of Scandinavian object shift which attribute these facts not to Minimality, but rather some kind of shape preservation—e.g. Müller (2001), Sells (2001), Fox and Pesetsky (2005), among others. A strong argument for this kind of approach is Holmberg's Generalization (Holmberg 1986), which is that object shift is only possible if the lexical verb has left the VP (if it hadn't, then object shift would result in objects appearing to the left of the lexical verb, reversing the normal ordering relations). If this is the right approach, then it's not entirely obvious that object shift really demonstrates the effects of Minimality on multiple A movement. Unfortunately, I am not aware of any more solid examples of multiple A movement with which to investigate the issue of Minimality effects.

find this in Nez Perce (Sahaptian), where C can agree with both subject and object in certain configurations (those where the subject isn't second person—see Deal 2015a,b for discussion):

(470) Nez Perce multiple complementizer agreement

a. ke-**m-ex** kaa cewcew-téetu
C-**2-1** then telephone-HAB.PRS
'when I call you' (Deal 2015b: 410)

b. ke-**pe-m** kaa Angel-nim kaa Tatlo-nm hi-cewcew-tée-'nix
C-**PL-2** then Angel-ERG and Tatlo-ERG 3SBJ-telephone-HAB.PRS-PL.SBJ
'when Angel and Tatlo call you' (Deal 2015b: 410)

In (470a), C shows both first person *-ex* and second person *-m* markers, indexing the 1SG subject and 2SG object. In (470b), C shows both plural *-pe* and second person *-m*, indexing the 3PL subject and 2SG object.

We can also find similar such multiple agreement in Inuit. Compton (2016, 2018) argues that C agrees with both ergative and absolutive arguments in Inuktitut (Inuit),[8] which in many (if not most) cases results in a person portmanteau (Woolford 2016):

(471) Inuktitut multiple C agreement

a. Jaani-up taku-qqau-ja-**nga** Alana.
John-ERG.SG see-REC.PST-DECL.TR-**3SG:3SG** Alana
'John saw Alana.' (Compton 2016: 242)

b. Taku-qqau-ja-**rma**.
see-REC.PST-DECL.TR-**2SG:1SG**
'You saw me.' (Compton 2016: 243)

With a 3SG ergative agent and 3SG absolutive object in a declarative, we get the portmanteau *-ŋa* '3SG:3SG' marking agreement with both arguments (471a). With a 2SG ergative agent and a 1SG absolutive object in a declarative, we get the portmanteau *-ʁma* '2SG:1SG' marking agreement with both arguments (471b).

Thus, just like we've seen in the domain of A and Ā movement, we can find both "agree with closest" as well as "agree with all" patterns. However, in contrast to movement, where we failed to find anti-Minimality effects (i.e. "move furthest"), we *can* actually find anti-Minimality effects in the domain of φ agreement. These would be examples of "agree with furthest" agreement patterns, or LOWEST PREFERNCE. One place where this is common is in ergative-absolutive languages, where an agreement marker can skip over an ergative in preference for an absolutive. For example, in Hindi (Indo-Aryan) perfective ditransitives, the verb will skip over both ergative agent and dative recipient to agree with absolutive themes:

[8] Though see Yuan (2018, 2021) for arguments that Inuktitut object agreement is actually clitic doubling, and it's Kalaallisut that actually shows true φ agreement with multiple arguments. We can safely abstract away from this issue here.

(472) Agreeing with themes of ditransitives in Hindi

a. Ravii=ne niinaa=ko kelaa khilaa-**yaa**.
Ravi=ERG Nina=DAT banana(M) eat.CAUS-**PFV.M.SG**
'Ravi fed Nina a banana.'

b. Ravii=ne niinaa=ko roṭii khilaa-**yii**.
Ravi=ERG Nina=DAT bread(F) eat.CAUS-**PFV.F.SG**
'Ravi fed Nina a bread.' (Mohanan 1990: 135)

As we can see, the form of the verb varies depending on whether the theme is masculine (*kelaa* 'banana') or feminine (*roṭii* 'bread'). This looks like a blatant Minimality violation—how are we skipping over the two higher arguments in favor of the lowest one?

We can also find relativized lowest preference: that is, a probe looking for the least local goal of a particular type. For instance, in Aqusha Dargwa (Nakh-Daghestanian), the person suffix only agrees with SAPs, no matter whether they are subject or object (omnivorous agreement for [PART]), and when there are multiple SAPs, we get agreement with the *lowest* one—the object:

(473) SAP relativization in Aqusha

a. ħu-ni il-di b-ax-un-**ri**.
2SG-ERG 3-PL F.PL-feed-AOR-**2SG**
'You fed them.'

b. il-da-ni ħu r-ax-un-**ri**.
3-PL-ERG 2SG F.SG-feed-AOR-**2SG**
'They fed you.' (van den Berg 1999: 164)

(474) Agreeing with lowest SAP in Aqusha

a. ħu-ni nu r-it-i-**ra**.
2SG-ERG 1SG F.SG-hit-AOR-**1**
'You hit me.'

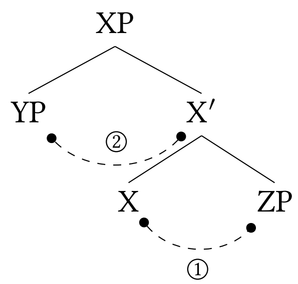
b. nu-ni ħu r-it-i-**ri**.
1SG-ERG 2SG F.SG-hit-AOR-**2SG**
'I hit you.' (van den Berg 1999: 158)

In (473), I show that the person suffix in Aqusha is relativized to [PART]: it'll agree with SAPs no matter whether they're the subject (473a) or object (473b). In (474), we can see that when there are multiple SAPs, and thus multiple potential agreement targets, the person suffix will index the *lower* SAP, no matter whether it's first (474a) or second person (474b). Given that the person suffix sits outside of TAM suffixes (like the aorist suffix in these examples), it should c-command both arguments. If it can agree with SAP external arguments (473a), why should it be skipping over SAP external argument to agree with a less local SAP internal argument (474)? Again, this looks like a Minimality violation.

These kinds of anti-Minimality patterns in φ agreement have certainly not gone unnoticed in the literature, and there are a number of existing analyses that propose Minimality-obeying derivations. For instance, in Hindi, it has been shown that the correct generalization is the the verb agrees with the *absolutive/nominative* argument (Kachru et al. 1976, Mohanan 1990, 1994, Bobaljik 2008, a.o.), which allows for an analysis in which probes can be CASE-DISCRIMINATING, only able to agree with certain kinds of cases (Bobaljik 2008, Preminger 2014, Baker 2015, a.o.). With this tool of case-discrimination, we can thus say that in Hindi, the verb agrees with the closest argument unmarked for case, restoring Minimality.[9]

However, not all anti-Minimality patterns can be analyzed with the tool of case-sensitive probes—as we've seen, in Aqusha, the person suffix can agree with both ergatives as well as absolutives (473). There are two other main analyses of anti-Minimality patterns in the literature, which we can call the LOW PROBE analysis and the SYNTACTIC INVERSION analysis. Under the low probe analysis, we restore Minimality by placing the probe low, such that it interacts with lower arguments first, before (potentially) reprojecting and probing its specifier via a Cyclic Agree mechanism (Béjar 2003, Béjar and Rezac 2009, a.o.):

(475)



In this schematic, X first probes ZP, before then potentially reprojecting and probing its specifier YP. In this way, even though ZP is lower in the tree than YP, X probing it is derivationally prior to X probing YP, and thus ZP is the "closest" goal to X, restoring Minimality. Applying this analysis to Aqusha, we could say that the person suffix is actually rather low, between the external argument and internal argument (e.g. in Voice), and it's specified to search for [PART]: if it finds [PART] in the internal argument, it stops there, but if it doesn't, it continues to the external argument. In this way, we can capture the surface anti-Minimality of Aqusha agreement. However, this complicates the syntax-morphology mapping, as the person suffix sits outside of TAM material, and thus by the Mirror Principle (Muysken 1981, Baker 1985, a.m.o.) we wouldn't expect it to be so low. A Cyclic Agree analysis of the Aqusha person suffix would thus need to be supplemented by an account of the placement of the person suffix in the verbal template.

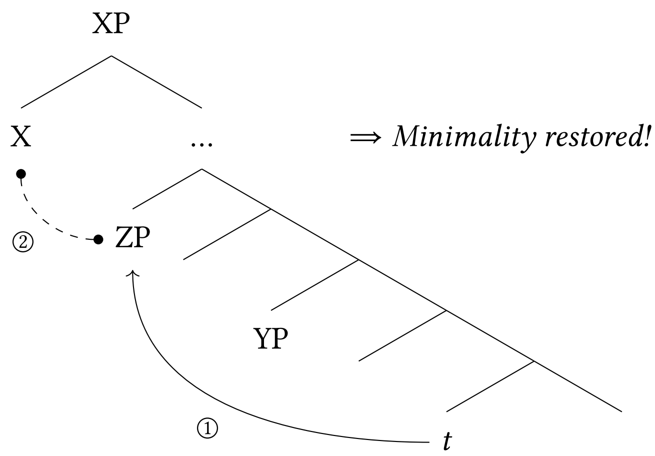
Another alternative analysis is syntactic inversion: the relevant probe really is high, but the lower argument moves over the higher one, restoring Minimality (Myler 2017, Colley 2018, a.o.):

[9] Evidence for this comes from imperfective clauses with two unmarked case arguments—the verb agrees with the external argument, the higher of the two arguments:

(i) a. Ravii roṭii khaa-**egaa**.
Ravi(M) bread eat-**FUT.3.M.SG**
'Ravi will eat bread.'

b. Niinnaa roṭii khaa-**egii**.
Nina(F) bread eat-**FUT.3.F.SG**
'Nina will eat bread.' Hindi (Mohanan 1990: 136)

(476)



Here, even though YP originally c-commands ZP, ZP first moves over YP before X probes—this is the syntactic inversion step. X now encounters ZP first, resulting in no violation of Minimality when agreeing with the (originally) least local goal. Applying this analysis to Aqusha, we could say that internal arguments (or at least [PART] internal arguments) actually move over the external argument, and thus are the closest targets for a higher probe. However, the plausibility of this analysis rests on finding data for this step of syntactic inversion—for the closely related Sanzhi Dargwa, Forker (2019) writes that "[o]utside the realm of morphology there are almost no indications for ergativity. Instead, accusative alignment, neutral alignment and no alignment are found" (Forker 2019: 69).

To summarize: though there are many cases of Minimality-obeying φ agreement, there are quite a few instances of what look like anti-Minimality effects—lowest preference—in contrast with movement. Existing analyses—a case-sensitive probe, a low probe, syntactic inversion—seek to restore Minimality by elaborating on the syntax. For case-sensitive probes, this is an elaboration on the syntactic mechanism of Agree, allowing a probe to be picky about what cases it can target. For a low probe, this is by changing the syntactic position of the probe, placing it perhaps lower than we might expect. For syntactic inversion, this is by changing the syntactic position of the potential agreement targets.

But what if there is abundant evidence *against* all these syntactic operations in a particular language? Should we simply give up on Minimality, at least for φ agreement? If so, this would require us to give up on the hypothesis that a single syntactic mechanism, Agree, underlies both movement and agreement dependencies. In this chapter, I present such a case—striking anti-Minimality effects with peripheral agreement in several Algonquian languages which cannot be given any of the above pre-existing analyses. However, I show that this does not force us to give up on Minimality in φ agreement, once we realize that Minimality-obeying derivations allow for both Agree-with-closest as well as Agree-with-all patterns (deriving phenomena like multiple *wh* movement, multiple object shift, and multiple agreement). A probe that has been valued multiple times by Agree in the syntax might present a number of challenges to the morphology: how do we expone a head with multiple feature bundles on it? I propose that this more general morphological issue, faced in other domains such as multiple case assignment, offers the key to understanding Algonquian anti-Minimality. Building on previous work (Béjar and Massam 1999, Yoon 2004, Merchant 2006, Pesetsky 2013, Alboiu and Hill 2016, Levin 2017, Richards 2017), I show that one possible outcomes of multiple valuation in the domain of case is exponing only the derivationally-last case value, a result we can call Expone Outermost. Applying this to the domain of φ agreement, Expone Outermost combined with multiple agreement would result in the surface appearance of agreeing with the least local goal—anti-Minimality—without needing any extra unmotivated syntactic mechanism. This morphological derivation of anti-Minimality is, I propose, at the root of Algonquian lowest preference in peripheral agreement. Additionally, the fact that this kind of derivation is crucially *morphological* and post-syntactic helps us explain why it's specifically φ agreement—which involves both syntactic (Agree) as well as morphological components (spelling out the features copied)—that seems to so abundantly display anti-Minimality effects crosslinguistically. Movement dependencies, which are derived purely in the syntax (Agree followed by internal Merge), cannot make use of this morphological pathway to anti-Minimality: we thus robustly fail to find anti-Minimality effects in movement.

With the theoretical background thus set and the eventual conclusions appropriately foreshadowed, the rest of this chapter turns to presenting in detail the typology of peripheral agreement patterns across Algonquian, showing how this particular case of anti-Minimality cannot be given any pre-existing syntactic analyses, and presenting in more detail the proposed morphological solution. Then, I show how this analysis can be straightforwardly extended to capture the full range of peripheral agreement behaviors across the whole family, and discuss the typological predictions of the present proposal—which I argue are good predictions.

10.2 The Algonquian data

In this section, I'll carefully go through variation in the behavior of the peripheral suffix across Algonquian in scenarios with more than one third person, as well as in ditransitives. In (non-ditransitive) scenarios with only one third person, the languages all patterned alike, with the peripheral suffix displaying an omnivorous third person agreement. However, we find interesting variation when there are multiple potential third person goals in the clause, and the resulting picture is that Algonquian languages sort themselves into four main categories:[10]

1. Highest: C agrees with the highest third person.
   Languages: Arapaho, Blackfoot, Cree-Innu-Naskapi, Menominee, Meskwaki-Sauk-Kickapoo, Miami-Illinois
2. Lowest: C agrees with the lowest third person...
   (A) ...full stop.
   Languages: Cheyenne, Mi'gmaq, Passamaquoddy, Penobscot
   (B) ...but not themes of ditransitives.
   Languages: Ojibwe-Algonquin, Potawatomi, Shawnee

[10]There is another parameter of variation which has to do with the agreement pattern in AI+O verbs (verbs with intransitive *v* that still take on object): in languages like Odawa (a variety of Ojibwe), C agrees with third person objects of AI+O verbs, but in other languages, like Oji-Cree (another variety of Ojibwe), C cannot agree with objects of AI+O verbs, instead agreeing with the subject (Xu 2022). I abstract away from this point of variation here.

(C) …that is definite/specific. If all third persons are indefinite/nonspecific, C agrees with the highest argument.

Languages: Delaware, Mahican, Wampanoag, Western Abenaki, Proto-Algonquian

To illustrate each of these categories, I'll be using our sample of four languages, Blackfoot, Passamaquoddy, Ojibwe, and Wampanoag, going first through monotransitives before then turning to ditransitives. This section is rather long and data-oriented, and I aim to be as empirically exhaustive as possible. Readers more interested in the theoretical conclusions of this chapter are warmly encouraged to merely skim through this section to get a feel for the agreement patterns we'll be looking at—especially the three types of Lowest languages, which will be the core focus of this chapter.

10.2.1 3⟶3 direct

In monotransitive 3⟶3 direct scenarios, the languages divide into three categories: in Blackfoot, peripheral agreement indexes the external argument; in Ojibwe and Passamaquoddy, peripheral agreement indexes the internal argument; and in Wampanoag, due to the absolute-objective contrast, peripheral agreement indexes the internal argument if it's specific (objective), else it indexes the external argument (absolute).

Thus, in the following Blackfoot 3⟶3 direct forms, we can see that the peripheral suffix tracks changes in the number of the external argument:

(477) *Blackfoot* (Frantz 2017: 46–47, 58)

a. ikákomimm-ii-**wa**
love$_{\text{TA}}$-3OBJ-**SG**
'she$_{\text{PROX}}$ loves her/them$_{\text{OBV}}$'

b. ikákomimm-ii-**yi**
love$_{\text{TA}}$-3OBJ-**PL**
'they$_{\text{PROX}}$ love her/them$_{\text{OBV}}$'

c. ikóón-im-**a**
take.down$_{\text{TI}}$-IN.OBJ-**SG**
'she took it/them down'

d. ikóón-im-**i**
take.down$_{\text{TI}}$-IN.OBJ-**PL**
'they took it/them down'

In the left column we have singular external arguments and singular peripheral suffixes, and in the right column we have plural external arguments and plural peripheral suffixes. In these forms there is nothing exponing the number of the internal argument on the verb—thus, the number of the internal argument in the Blackfoot 3⟶3 direct is ambiguous. Indeed, this is exactly the locality pattern we'd expect from a third person probe in C: the external argument here is the closest third person to C, and so that's what C will agree with.

Turning now to Ojibwe and Passamaquoddy, we see that in these languages peripheral agreement indexes the internal argument:

(478) *Southwestern Ojibwe* (Nichols 1980: 282, 289)

a. o-waabam-aa-waa-**n**
3-see$_{\text{TA}}$-3OBJ-PL-**OBV**
'they$_{\text{PROX}}$ see her/them$_{\text{OBV}}$'

b. o-waaband-aa-naa-waa-**Ø**
3-see$_{\text{TI}}$-IN.OBJ-N-PL-**IN.SG**
'they$_{\text{PROX}}$ see it'

c. o-waaband-aa-naa-waa-**n**
3-see$_{\text{TI}}$-IN.OBJ-N-PL-**IN.PL**
'they$_{\text{PROX}}$ see them$_{\text{IN}}$'

(479) *Passamaquoddy*

a. '-koselom-a-wa-**l**
3-love$_{\text{TA}}$-3OBJ-PL-**OBV.SG**
'they$_{\text{PROX}}$ love her$_{\text{OBV}}$'

b. '-koselom-a-wa-`
3-love$_{\text{TA}}$-3OBJ-PL-**OBV.PL**
'they$_{\text{PROX}}$ love them$_{\text{OBV}}$'

c. '-koseltom-oni-ya-**Ø**
3-love$_{\text{TI}}$-N-PL-**IN.SG**
'they love it'

d. '-koseltom-oni-ya-**l**
3-love$_{\text{TI}}$-N-PL-**IN.PL**
'they love them$_{\text{IN}}$'

Note that obviatives in Southwestern Ojibwe don't distinguish number—a robust metasyncretism in many (but not all) Algonquian languages (Bliss and Oxford 2016, 2017).[11] Nevertheless, we can clearly tell in the 3PL→OBV scenario (478a) that peripheral agreement is indexing the internal argument because it's exponing obviative features, rather than proximate ones. Additionally, in the 3PL→IN TI forms in (478b,c), the peripheral suffix tracks the number of the inanimate internal argument. In Passamaquoddy (479), we can simply compare the singular internal arguments in the left column to the plural internal argument in the right column—the peripheral suffix changes accordingly. This behavior is very puzzling: why would C prefer agreeing with the internal argument—the lower third person—when there's a perfectly acceptable and more local third person it could have agreed with—the external argument?

Finally, turning to Wampanoag, we find an absolute-objective contrast. In the absolute forms (480), peripheral agreement tracks the external argument and the internal argument is nonspecific, and in the objective forms (481), peripheral agreement tracks the specific internal argument.

(480) *Wampanoag (absolute)* (fermino 2000: 48, 51–52)

a. nâw-â-w-**Ø**
see$_{\text{TA}}$-3OBJ-3-**PROX.SG**
'she$_{\text{PROX}}$ loves someone/some people$_{\text{OBV}}$'

b. nâw-â-w-**ak**
see$_{\text{TA}}$-3OBJ-3-**PROX.PL**
'they$_{\text{PROX}}$ see someone/some people$_{\text{OBV}}$'

c. nâm(-uw)-**Ø**
see$_{\text{TI}}$-3-**PROX.SG**
'she$_{\text{PROX}}$ sees something/some things'

d. nâm-w-**ak**
see$_{\text{TI}}$-3-**PROX.PL**
'they$_{\text{PROX}}$ see something/some things'

(481) *Wampanoag (objective)* (fermino 2000: 50, 56)

a. wu-nâw-ô-wô-**h**
3-see$_{\text{TA}}$-3OBJ-PL-**OBV**
'they$_{\text{PROX}}$ see her/them$_{\text{OBV}}$'

[11] The same holds for many other dialects of Ojibwe, like Oji-Cree, Odawa, Eastern Ojibwe, and Algonquin. A conservative distinction between obviative singular *-(a)n* and obviative plural *-(a)'* is found in Saulteaux as well as dialects spoken on the north(west) shore of Lake Superior, in the Border Lakes region of Ontario, and in (north)western Ontario. In these dialects, we'd get a distinction between *owaabamaawan* 'they$_{\text{PROX}}$ see her$_{\text{OBV}}$' vs. *owaabamaawa'* 'they$_{\text{PROX}}$ see them$_{\text{OBV}}$'. See Valentine (1994) for more information, especially pp. 532, 552.

b. u-meech-unâ-w-**Ø**
3-eat$_{\text{TI}}$-N-PL-**IN.SG**
'they$_{\text{PROX}}$ eat it'

c. u-meech-unâ-wôw-**ash**
3-eat$_{\text{TI}}$-N-PL-**IN.SG**
'they$_{\text{PROX}}$ eat them$_{\text{IN}}$'

Note that, just like in Southwestern Ojibwe, Wampanoag doesn't distinguish obviative singular from obviative plural; thus, the objective 3PL→OBV form (481a) is ambiguous with respect to the number of the internal argument. The important thing to notice here is that the choice of whether C agrees with the external argument (in the absolute) or the internal argument (in the objective) is entirely dependent on properties of the *internal* argument. If the internal argument is "good enough"—is specific in the relevant sense for Wampanoag—then C must agree with it. It's only when the internal argument *isn't* "good enough" (is not specific) that C has a chance of agreeing with the external argument. Thus, Wampanoag also shows a type of lowest preference: C prefers agreeing with the lowest specific third person, if possible, otherwise it can settle for a higher one. Put a different way, the internal argument "intervenes" for agreement with the external argument—a kind of anti-Minimality pattern. How can this be?

10.2.2 3→3 inverse

When we turn to the third person inverse, the picture remains the same—Blackfoot shows highest preference, and Southwestern Ojibwe, Passamaquoddy, and Wampanoag show lowest preference. Recall that in the third person inverse the internal argument A moves over the external argument, flipping the c-command relationships by the time C probes (Section 2.4.3).

Accordingly, in Blackfoot, peripheral agreement indexes the now-more-local internal argument in the third person inverse:

(482) *Blackfoot* (Frantz 2017: 62)

a. ots-ikákomimm-ok-**a**
3-love$_{\text{TA}}$-INV-**SG**
'she/they$_{\text{OBV}}$ love(s) her$_{\text{PROX}}$'

b. ots-ikákomimm-ok-oaa-**yi**
3-love$_{\text{TA}}$-INV-PL-**PL**
'she/they$_{\text{OBV}}$ love(s) them$_{\text{PROX}}$'

As is evident, peripheral agreement tracks the number of the internal argument in the third person inverse, and the number of the external argument is left ambiguous—exactly the opposite of what happens in the 3→3 direct. Again, this is entirely expected behavior from the perspective of Minimality: C is simply agreeing with the most local third person. Note that there are no IN→3 forms in Blackfoot as external arguments in Blackfoot must be sentient, capable of exerting agency (Johansson 2008, Ritter and Rosen 2010, Frantz 2017).

In contrast, in third person inverse forms in Ojibwe and Passamaquoddy, peripheral agreement indexes the external argument—the now-lowest argument of the clause:

(483) *Southwestern Ojibwe* (Nichols 1980: 292)

a. o-waabam-igo-waa-**n**
3-see$_{\text{TA}}$-INV-PL-**OBV**
'she/they$_{\text{OBV}}$ see them$_{\text{PROX}}$'

b. o-waabam-igo-naa-waa-**Ø**
3-see$_{\text{TA}}$-INV-N-PL-**IN.SG**
'it sees them$_{\text{PROX}}$'

c. o-waabam-igo-naa-waa-**n**
3-see$_{\text{TA}}$-INV-N-PL-**IN.PL**
'they$_{\text{IN}}$ see them$_{\text{PROX}}$'

(484) *Passamaquoddy*

a. '-kikehl-oku-wa-**l**
3-heal$_{\text{TA}}$-INV-PL-**OBV.SG**
'she$_{\text{OBV}}$ heals them$_{\text{PROX}}$'

b. '-kikehl-oku-wa-**`**
3-heal$_{\text{TA}}$-INV-PL-**OBV.PL**
'they$_{\text{OBV}}$ heal them$_{\text{PROX}}$'

c. '-kikehl-oku-ni-ya-**Ø**
3-heal$_{\text{TA}}$-INV-N-PL-**IN.SG**
'it heals them'

d. '-kikehl-oku-ni-ya-**l**
3-heal$_{\text{TA}}$-INV-N-PL-**IN.PL**
'they$_{\text{IN}}$ heal them'

The striking observation about this data is that the step of A movement involved in the derivation of the third person inverse *feeds* the lowest preference of peripheral agreement (exactly the opposite of what one would expect from a syntactic inversion analysis of lowest-preference; Myler 2017, Colley 2018). Again, why would C skip over a more local third person in favor of a more distant one?

In the third person inverse in Wampanoag, we again find an absolute-objective contrast. In the absolute, the external argument is nonspecific (and in this case actually fails to be indexed by the verb at all, resulting in an animate-inanimate ambiguity), and peripheral agreement indexes the internal argument (485), and in the objective, the external argument is specific and peripheral agreement is accordingly able to index it (486):

(485) *Wampanoag (absolute)* (Goddard and Bragdon 1988: 520, fermino 2000: 59)

a. wachôn-uq-**Ø**
keep$_{\text{TA}}$-INV-**PROX.SG**
'some$_{\text{OBV/IN}}$ keep(s) her$_{\text{PROX}}$'

b. wachôn-uq-**ak**
keep$_{\text{TA}}$-INV-**PROX.PL**
'some$_{\text{OBV/IN}}$ keep(s) them$_{\text{PROX}}$'

(486) *Wampanoag (objective)* (fermino 2000: 58, 61)

a. u-p8n-uk-uwô-**h**
3-put$_{\text{TA}}$-INV-PL-**OBV**
'she/they$_{\text{OBV}}$ put them$_{\text{PROX}}$'

b. u-wachôn-uq-unâ-w-**Ø**
3-keep$_{\text{TA}}$-INV-N-PL-**IN.SG**
'it keeps them'

c. u-wachôn-uq-unâ-wôw-**ash**
3-keep$_{\text{TA}}$-INV-N-PL-**IN.SG**
'they$_{\text{IN}}$ keep them'

With the internal argument moving over the external argument, this is exactly parallel to what we saw in the 3⟶3 direct in Wampanoag: C will try it's best to agree with the lowest argument (here, the external argument), settling for the higher one (the internal argument) only if the lower argument isn't good enough (i.e. isn't specific). Again, lowest preference—why? Why do we get such rampant anti-Minimality—strikingly fed by the step of A movement found in the third person inverse—in Ojibwe, Passamaquoddy, and Wampanoag?

10.2.3 Ditransitives

Let's now move from monotransitives to ditransitives. There is unfortunately not too much paradigmatic data in the literature on the behavior of verbal agreement in ditransitive sentences (apart from the admirably complete Passamaquoddy TA+O paradigms in Francis and Leavitt 2008), so much of this section is devoted to marshalling together as complete an empirical picture of ditransitive peripheral agreement as possible. In doing so, an interesting and coherent picture emerges: all four of our sample languages behave in different ways in ditransitives.

- **Blackfoot:** themes of ditransitives are never indexed by peripheral agreement, even if they're the only third person. Otherwise, C agrees with the highest third person.
- **Ojibwe:** themes of ditransitives are never indexed by peripheral agreement, even if they're the only third person. Otherwise, C agrees with the lowest third person.
- **Passamaquoddy:** themes of ditransitives can be indexed by peripheral agreement, and C agrees with the lowest third person.
- **Wampanoag:** themes of ditransitives can be indexed by peripheral agreement, but only if they are specific. C agrees with the lowest specific third person.

Note that while Blackfoot and Ojibwe are alike in that C cannot see themes of ditransitives, they crucially differ in that Blackfoot is a Highest language whereas Ojibwe is a Lowest language.

In the following subsections, I justify these generalizations in quite a bit of detail. If the reader would prefer to accept these generalizations as they are and not wade into the empirical weeds, I would encourage them to skip to Section 10.2.4 for the final summary.

Blackfoot

In Blackfoot, themes of ditransitives are completely invisible to C. As Blackfoot C agrees with the highest third person, in order to give C the best chance of being able to agree with the theme of a ditransitive we must ensure that both donor and recipient are SAPs. If we do that, we can see that C still is unable to agree with the theme, as in the following examples:

(487) Blackfoot (Russell et al. 2012: 65, 68)

a. Nits-íppit-áakii-hsin-i **kít-ohkot-o**.
1-old-woman-NMLZ-IN.SG **2-give$_{\text{TA+O}}$-2OBJ**
'My old-woman's age I give to you.'

b. **Kít-ohkot-o** ámo-yi niitá'paisiksikimm-i.
2-give$_{\text{TA+O}}$-2OBJ DEM-IN.SG coffee-IN.SG
'I gave you this coffee.'

In both these sentences, we have 1SG⟶2SG scenarios with the ditransitive verb root *ohkot-* 'give'. In neither of these examples do we find a peripheral suffix indexing the theme, even though in principle we could have gotten the proximate/inanimate singular peripheral suffix *-wa.* As Bliss (2013) shows, putting a peripheral suffix on these verb forms is impossible:

(488) Blackfoot (Bliss 2013: 216)

a. Kits-skiitat-ó amó-stsi pisátsskiitaan-ists.
2-bake$_{\mathrm{TA}}$-2OBJ DEM-PL cake-PL
'I baked these cakes for you.'

b. *Kits-skiitat-ó-**yi** amó-stsi pisátsskiitaan-ists.
2-bake$_{\mathrm{TA}}$-2OBJ-**PL** DEM-PL cake-PL
Intended: 'I baked these cakes for you.'

Striking verification that themes of ditransitives are inaccessible to Blackfoot C comes from applicatives of monotransitives. In an SAP→3 monotransitive, as we've seen, C will agree with the third person object—however, once we applicativize the verb, that third person object will no longer be indexed by the peripheral suffix:

(489) Blackfoot (Russell et al. 2012: 69)

a. Nit-áánist-aa-**wa**.
1-say$_{\mathrm{TA}}$-3OBJ-**PROX.SG**
'I told him.'

b. Kit-íík-aanist-om-o.
2-very-say$_{\mathrm{TA}}$-APPL-2OBJ
'I already told him for you.'

This is not straightforwardly predicted by a third person probe in C—why shouldn't it be able to probe down and find a third person theme of a ditransitive, if the theme is only third person in the clause?

As far as I am aware, this is also true of all other languages with the same peripheral agreement pattern as Blackfoot, though I am not able to find the relevant examples for all of these languages. We can find parallel examples in Plains Cree:

(490) Plains Cree SAP→SAP→3 ditransitives

a. Êwakon-ik **ki-miy-iti-n**.
DEM.ENDO-PROX.PL **2-give$_{\mathrm{TA+O}}$-2OBJ-PART.SG**
'I give you these [puppies].' (Bloomfield 1934: 104)

b. Êkota cîkih kâ= wîki-yêk, nîso môsw-ak **ki-miy-iti-n**.
right.there near KA= live$_{\mathrm{AI}}$-2PL.CJ two moose-PROX.PL **2-give$_{\mathrm{TA+O}}$-2OBJ-PART.SG**
'Close by to where you dwell, two moose I give you.' (Bloomfield 1934: 208)

c. **Ki-miy-iti-n** pisiskiw-ak, mihcêt.
2-give$_{\mathrm{TA+O}}$-2OBJ-PART.SG animal-PROX.PL many
'I give you animals, many of them.' (Paskemin and Paskemin 2002: 178)

In all these examples, the donor is first singular, the recipient is second singular, and the theme is proximate third plural—thus, all else being equal, one might expect the peripheral suffix *-ak*

'PROX.PL' to appear indexing the third person theme. This is evidently not what you get—instead, there is no peripheral suffix at all in this scenario, just like in Blackfoot.

Crucially, however, the behavior of agreement with external argument and recipient is not affected by these sentences being ditransitive: these interact in just the same way as in monotransitives. Thus, if you have an SAP giving something to a third person or vise versa, then peripheral agreement will index the third person, no matter its syntactic role:

(491) Blackfoot SAP⟶3⟶3 ditransitives

a. Nit-ohkot-á-**wa** óm-i ponokáómitaa-yi.
1-give$_{\text{TA+O}}$-3OBJ-**PROX.SG** DEM-OBV.SG horse-OBV.SG
'I gave her$_{\text{PROX}}$ that horse$_{\text{OBV}}$.' (Russell et al. 2012: 66)

b. Nit-ó'to-mo-a-**wa** ann-á n-innst-a om-íksi
1-take$_{\text{TA}}$-APPL-3OBJ-**PROX.SG** DEM-PROX.SG 1-older.sibling-PROX.SG DEM-PL
apaisstaamiinamm-iksi.
apple-PL
'I picked up the apples$_{\text{OBV}}$ for my older sister$_{\text{PROX}}$.' (Russell et al. 2012: 68)

(492) Blackfoot 3⟶SAP⟶3 ditransitives

a. Nit-áak-ahkomá'tak-k-innaan-**a** ámo-yi ponokáomitaa-yi.
1-FUT-borrow$_{\text{TA+O}}$-INV-1PL.EXC-**PROX.SG** DEM-OBV.SG horse-OBV.SG
'She$_{\text{PROX}}$ will borrow this horse$_{\text{OBV}}$ from us$_{\text{EXC}}$.' (Russell et al. 2012: 63)

b. N-a n-iksísst-a nit-áák-ohpopaat-omo-ok-**a** n-itán-i.
DEM-PROX.SG 1-mother-PROX.SG 1-FUT-babysit$_{\text{TA}}$-APPL-INV-**PROX.SG** 1-daughter-OBV.SG
'My mother$_{\text{PROX}}$ is going to babysit my daughter$_{\text{OBV}}$ for me.' (Bliss 2013: 372)

From (491) we learn that the peripheral suffix indexes the third person recipient in SAP⟶3⟶3 ditransitives, whereas from (492) we learn that the peripheral suffix indexes the third person donor in 3⟶SAP⟶3 ditransitives.

Similarly, in ditransitives where all the arguments are third person, C will index the highest third person—in the direct, this will be the external argument:

(493) Blackfoot 3⟶3⟶3 direct ditransitives

a. Aak-o'to-mo-yii-**wa**=yi om-istsi íssinnii'p-istsi.
FUT-take$_{\text{TA}}$-APPL-3OBJ-**PROX.SG**=3SG.PRN DEM-PL macaroni-PL
'She$_{\text{PROX}}$ will pick up the macaroni for her$_{\text{OBV}}$.' (Russell et al. 2012: 68)

b. Ííhpommo-yii-**wa** ann-i o-tán-i amo-yi asóka'sim-i.
IC.buy$_{\text{TA+O}}$-3OBJ-**PROX.SG** DEM-OBV.SG 3-daughter-OBV.SG DEM-OBV.SG dress-OBV.SG
'She$_{\text{PROX}}$ bought that dress$_{\text{OBV}}$ for her daughter$_{\text{OBV}}$.' (Bliss 2013: 102)

Unfortunately, I have not been able to find examples of inverse ditransitive verbs with all third person arguments. I expect that peripheral agreement should index the recipient in these forms, as that is the derived highest third person argument.

In Plains Cree, another member of the Highest group along with Blackfoot, we can verify this prediction: peripheral agreement indexes the recipient of third person inverse ditransitive verbs:

(494) Plains Cree 3⟶3⟶3 inverse ditransitives

a. Kahkiyaw miy-ik-Ø-**Ø** tahto kâ= pêw= atâm-â-t.
all give$_{\text{TA+O}}$-INV-3-**PROX.SG** each KA= come= buy$_{\text{TA+O}}$-3OBJ-3CJ
'He$_{\text{OBV}}$ gave <u>him</u>$_{\text{PROX}}$ all the things he$_{\text{PROX}}$ had come to buy [from him$_{\text{OBV}}$].'
(Bloomfield 1934: 106)

b. Ôhi ohci o-pahkêkin-om-iwâw-a ohci mistahi miy-ikw-Ø-**ak**.
this.IN.PL for 3-hide-POSS-3PL-IN.PL for many give$_{\text{TA+O}}$-INV-3-**PROX.PL**
'For their hides he$_{\text{OBV}}$ gave <u>them</u>$_{\text{PROX}}$ many things.' (Bloomfield 1934: 160)

In these sentences, the inverse marker indicates that the third person recipient has A moved over the third person external argument (exactly parallel to the monotransitive third person inverse). Accordingly, peripheral agreement indexes the derived highest argument.

The resulting picture is this: in the Highest languages like Blackfoot (and Plains Cree), the Highest pattern is by and large preserved in ditransitives, with C agreeing with the highest third person. The only exception is that themes of ditransitives are entirely invisible to C—in fact, there is no agreement marker on the verb that will ever index a theme of a ditransitive (the theme sign only agrees with the recipient, and central agreement can only see the external argument and recipient). This last fact is one that I will have no good explanation for in this thesis, and one that deserves more consideration. For our purposes though, we can just treat this essentially like an accident, and say that theme of ditransitives are simply not accessible to C (similar to what I'll eventually say for Ojibwe).

Ojibwe

Let's turn now to Ojibwe. Just like in Blackfoot, themes of ditransitives are completely invisible to C. If we have an SAP⟶SAP⟶3 scenario, giving the theme the best chance possible at being indexed, there is simply no peripheral agreement at all:

(495) a. **Gi-daa= ozhit-amaw-Ø** ina minjikaawan-ag?
2-MOD= make$_{\text{TI}}$-APPL-1OBJ POLQ mitt-PROX.PL
'Can you make me some mitts?'
Southwestern Ojibwe (https://ojibwe.lib.umn.edu/main-entry/ozhitamaw-vta)

b. **Ki-ka= miin-ini-nim** hsa miikiwewin-an.
2-FUT= give$_{\text{TA}}$-2OBJ-2PL EMPH gift-IN.PL
'I will give you gifts.' Saulteaux (https://www.bible.com/bible/1119/DAN.2.6.OJBR)

In the Southwestern Ojibwe example in (495a), we might have expected the verb *gidaa-ozhitamaw* 'you could make for me' to have a peripheral suffix *-ag* 'PROX.PL' indexing the theme *minjikaawanag* 'mitts', but it does not. Likewise, in the Saulteaux example in (495b), we might have expected the verb *kika-miininiim* 'I will give to y'all' to have a peripheral suffix *-an* 'IN.PL' indexing the theme *miikiwewinan* ‘gifts’, but it does not. Thus, it appears that, just like in Blackfoot and the other Highest languages, Ojibwe also does not allow C to agree with themes of ditransitives.

Turning now to ditransitives with only one SAP argument (SAP⟶3⟶3 and 3⟶SAP⟶3), we see an expected pattern. C agrees with the lowest third person it can, and given that themes of ditransitives are inaccessible, this results in the highest third person being indexed by peripheral agreement, just like in Blackfoot:

(496) Ojibwe SAP⟶3⟶3 ditransitives

a. N-gii= miin-aa-**Ø** ndo-odaabaan-an n-gwis-Ø.
1-PST= give$_{\text{TA+O}}$-3OBJ-**PROX.SG** 1-car-OBV 1-son-PROX.SG
‘I gave my car$_{\text{OBV}}$ to my son$_{\text{PROX}}$.’ Odawa (Rhodes 2011: 632)

b. N-gii= biid-maw-aa-**g** mnikwewn-an.
1-PST= bring$_{\text{TI}}$-APPL-**PROX.PL** drink-IN.PL
‘I brought them$_{\text{PROX}}$ the drinks.’ Odawa (Rhodes 2011: 648)

(497) Ojibwe 3⟶SAP⟶3 ditransitives

a. N-gii= giishkzh-amaa-g-**Ø** n-shkanzhi-in.
1-PST= cut$_{\text{TI}}$-APPL-INV-**PROX.SG** 1-fingernail-IN.PL
‘He$_{\text{PROX}}$ cut my nails for me.’ Odawa (Valentine 2001: 661)

b. Ganabaj mazina’igan in-gii= miin-igo-**og**.
maybe paper 1-PST= give$_{\text{TA+O}}$-INV-**PROX.PL**
‘Maybe they$_{\text{PROX}}$ gave me a piece of paper.’
Southwestern Ojibwe (Kegg and Nichols 1991: 62)

In (496), we can see that in SAP⟶3⟶3 scenarios peripheral agreement indexes the recipient (and crucially not the theme, even though it’s lower). Similarly, in (497), we learn that in 3⟶SAP⟶3 scenarios peripheral agreement indexes the external argument, rather than the lower theme.

Finally, let’s look at ditransitives where all the arguments are third person. Here we find a different pattern from Blackfoot. Instead of agreeing with the highest argument, C agrees with the middle argument in these scenarios in Ojibwe—the recipient in the 3⟶3⟶3 direct, the donor in the inverse:

(498) Ojibwe 3⟶3⟶3 direct ditransitives

a. …w-gii= miin-aa-**n** neyaab aaning iw bagoowyaan…
3-PST= give$_{\text{TA+O}}$-3OBJ-**OBV** back some that.IN.SG cloth
‘…and she$_{\text{PROX}}$ [my mother] gave her$_{\text{OBV}}$ back some of the cloth…’
Odawa (Valentine 2001: 656)

b. Makwa o-gii= miin-aa-**n** o-biiway-an ji= giizhoozi-ni-d.
bear 3-PST= give$_{\text{TA+O}}$-3OBJ-**OBV** 3-fur-IN.PL MOD= be.warm$_{\text{AI}}$-OBV-3CJ
‘The bear$_{\text{PROX}}$ gave them$_{\text{OBV}}$ his fur to keep warm.’
Southwestern Ojibwe (Gibbs 2010: 90)

(499) Ojibwe 3⟶3⟶3 inverse ditransitives

a. Gakina gegoo o-gii= wiind-amaa-go-**on**.
all anything 3-PST= say$_{TI}$-APPL-INV-**OBV**
'He$_{OBV}$ told her$_{PROX}$ all kinds of things.' Southwestern Ojibwe (Valentine 2005: 452)

b. Aapiji wenizhishin-g agwiwin o-gii= miin-igo-**on** ini gaa= wiidigem-igo-d.
very IC.be.beautiful$_{II}$-IN.CJ clothing 3-PST= give$_{TA+O}$-INV-**OBV** that.OBV IC.PST= be.married.to$_{TA}$-INV-3CJ
'Very beautiful was the clothing given her$_{PROX}$ by him$_{OBV}$ to whom she was married.' (lit. 'He$_{OBV}$ who was married to her$_{PROX}$ gave her$_{PROX}$ very beautiful clothing.')
Southwestern Ojibwe (Valentine 2005: 459)

In the direct example in (498a), C agrees with the obviative recipient 'her$_{OBV}$', rather than the proximate donor 'she$_{PROX}$ [my mother]' or the inanimate theme *aaning iw bagoowyaan* 'some of the cloth'. Similarly, in (498b), C agrees with obviative recipient 'them$_{OBV}$' rather than the donor *makwa* 'bear$_{PROX}$' or the theme *obiiwayan* 'his fur'.[12] In contrast, the inverse examples in (499) show agreement with the obviative donor, rather than the proximate recipient or the inanimate theme. In each case, C agrees with the middle argument. Put differently, C does its best to agree with the lowest third person, but it cannot agree with ditransitive themes, so it has to go one up to find the next lowest third person—the recipient in the direct or the donor in the inverse.

We end up with the following picture: as a Lowest language, in Ojibwe C always tries to agree with the lowest third person. This works smoothly in intransitives and monotransitives, but due to the ban on agreement with ditransitive themes, C will agree with the lowest third person out of the donor and recipient only.

Passamaquoddy

Now let's see how peripheral agreement behaves in Passamaquoddy ditransitives. Fortunately, Francis and Leavitt (2008) provide full paradigms of TA+O verb forms, which we will survey here. The main thing to notice for Passamquoddy is that, unlike in Blackfoot and Ojibwe, themes of ditransitives *are* accessible for agreement—thus, in Passamaquoddy, you really can always agree with the lowest third person.

So, in SAP⟶SAP⟶3 scenarios, you get peripheral agreement with the third person theme:

(500) Passamaquoddy SAP⟶SAP⟶3 ditransitives

a. kt-olihtu-w-i-ne-n-**Ø**
2-make$_{TI}$-APPL-1OBJ-N-1PL-**PROX.SG**
'you/y'all make it$_{PROX}$ for us'

b. kt-olihtu-w-i-ne-nnu-**k**
2-make$_{TI}$-APPL-1OBJ-N-1PL-**PROX.PL**
'you/y'all make them$_{PROX}$ for us'

[12] Actually, just from the surface verb from *ogii-miinaan* 'she$_{PROX}$ gave to her/them$_{OBV}$' in (498b), we can't tell if *-n* is obviative or inanimate plural, as those are always identical (a robust metasyncretism), and thus we can't *a priori* know whether C is indexing the obviative recipient or the inanimate plural theme. However, given that themes of ditransitives are never indexed in other forms, it's safe to assume that *-n* here must be realizing agreement with the obviative recipient.

c. kt-olihtu-w-i-ne-n-**Ø**
2-make$_{\text{TI}}$-APPL-1OBJ-N-1PL-**IN.SG**
'you/y'all make it for us'

d. kt-olihtu-w-i-ne-nnu-**l**
2-make$_{\text{TI}}$-APPL-1OBJ-N-1PL-**IN.PL**
'you/y'all make them$_{\text{IN}}$ for us'

In the left column we have singular themes (animate and inanimate), and in the right column we have plural themes (animate and inanimate)—the peripheral suffix varies accordingly.

Similarly, in SAP⟶3⟶3 and 3⟶SAP⟶3 ditransitives, peripheral agreement is again with the theme (and the number of the second lowest third person, whether donor or recipient, is accordingly left unspecified[13]):

(501) Passamaquoddy SAP⟶3⟶3 ditransitives

a. nt-olihtu-w-a-ne-nnu-**l**
1-make$_{\text{TI}}$-APPL-3OBJ-N-1PL-**OBV.SG**
'we$_{\text{EXC}}$ make it$_{\text{OBV}}$ for her/them$_{\text{PROX}}$'

b. nt-olihtu-w-a-ne-nnu-**`**
1-make$_{\text{TI}}$-APPL-3OBJ-N-1PL-**OBV.PL**
'we$_{\text{EXC}}$ make them$_{\text{OBV}}$ for her/them$_{\text{PROX}}$'

c. nt-olihtu-w-a-ne-n-**Ø**
1-make$_{\text{TI}}$-APPL-3OBJ-N-1PL-**IN.SG**
'we$_{\text{EXC}}$ make it$_{\text{IN}}$ for her/them'

d. nt-olihtu-w-a-ne-nnu-**l**
1-make$_{\text{TI}}$-APPL-3OBJ-N-1PL-**IN.PL**
'we$_{\text{EXC}}$ make them$_{\text{IN}}$ for her/them'

(502) Passamaquoddy 3⟶SAP⟶3 ditransitives

a. nt-oliht-a-ku-ne-nnu-**l**
1-make$_{\text{TI}}$-APPL-INV-N-1PL-**OBV.SG**
'she/they$_{\text{PROX}}$ make(s) it$_{\text{OBV}}$ for us$_{\text{EXC}}$'

b. nt-oliht-a-ku-ne-nnu-**`**
1-make$_{\text{TI}}$-APPL-INV-N-1PL-**OBV.PL**
'she/they$_{\text{PROX}}$ make(s) them$_{\text{OBV}}$ for us$_{\text{EXC}}$'

[13]There is a very interesting exception to this—namely, the central suffix will exceptionally index the number of the second-lowest third person only if *(i)* we have an inverse theme sign and an overt peripheral suffix and *(ii)* the highest ranked argument is singular. Put another way, the central suffix will exceptionally index the number of the higher third person only if *(i)* we have an inverse theme sign and *(ii)* the central suffix isn't already being used to mark the number of the SAP. Thus, in 3⟶SAP⟶3 scenarios, if the SAP is singular, the central suffix is recruited to mark the number of the third person donor:

(i) Passamaquoddy 3⟶SAP.SG⟶3 ditransitives

a. nt-oliht-a-ku-n-**Ø**{-ol, -`, -ol}
1-make$_{\text{TI}}$-APPL-INV-N-**SG**{-OBV.SG, -OBV.PL, -IN.PL}
'she$_{\text{PROX}}$ makes it/them$_{\text{OBV}}$ for me'

b. nt-oliht-a-ku-ni-**ya**{-ol, -`, -ol}
1-make$_{\text{TI}}$-APPL-INV-N-**PL**{-OBV.SG, -OBV.PL, -IN.PL}
'they$_{\text{PROX}}$ make it$_{\text{OBV}}$ for me'

In these forms, since we don't have a central suffix indexing the number of the SAP recipient (since it's singular), that slot can be taken over to mark the number of the donor. This also happens in 3⟶3⟶3 inverse ditransitives as well, when the proximate recipient is singular (and thus unmarked by the central suffix), and thus the central suffix has a chance to mark the number of the obviative donor:

(ii) Passamaquoddy 3⟶3SG⟶3 inverse ditransitives

a. 't-oliht-a-ku-n-**Ø**{-ol, -`, -ol}
3-make$_{\text{TI}}$-APPL-INV-N-**SG**{-OBV.SG, -OBV.PL, -IN.PL}
'she$_{\text{OBV}}$ makes it/them$_{\text{(OBV)}}$ for her$_{\text{PROX}}$'

b. 't-oliht-a-ku-ni-**ya**{-ol, -`, -ol}
3-make$_{\text{TI}}$-APPL-INV-N-**PL**{-OBV.SG, -OBV.PL, -IN.PL}
'they$_{\text{OBV}}$ make it$_{\text{(OBV)}}$ for her$_{\text{PROX}}$'

In all other ditransitive forms, the number of the second-lowest third person is ambiguous. I do not have an explanation for this curious morphological fact. Will Oxford (p.c.) points out that a similar "opportunistic" use of the central suffix (when it's not already occupied marking the plurality of a higher-ranked argument) is found in Mi'gmaq, Delaware, Wampanoag, and Menominee. Interestingly, this behavior is only found with the N formative.

c. nt-oliht-a-ku-ne-nnu-**Ø**
1-make$_{TI}$-APPL-INV-N-1PL-**IN.SG**
'she/they$_{PROX}$ make(s) <u>it</u> for us$_{EXC}$'

d. nt-oliht-a-ku-ne-nnu-**l**
1-make$_{TI}$-APPL-INV-N-1PL-**IN.PL**
'she/they$_{PROX}$ make(s) <u>them$_{IN}$</u> for us$_{EXC}$'

Again, peripheral agreement only cares about the theme, marking whether it's singular (left column) or plural (right column)—nothing about the higher two arguments changes this.

Finally, when we have three third persons in the clause, no matter whether it's direct or inverse, peripheral agreement will still index the theme:

(503) Passamaquoddy 3⟶3⟶3 direct ditransitives

a. 't-olihtu-w-a-ni-ya-**l**
3-make$_{TI}$-APPL-3OBJ-N-PL-**OBV.SG**
'they$_{PROX}$ make <u>it</u>$_{OBV}$ for her/them$_{OBV}$'

b. 't-olihtu-w-a-ni-ya-**`**
3-make$_{TI}$-APPL-3OBJ-N-PL-**OBV.PL**
'they$_{PROX}$ make <u>them</u>$_{OBV}$ for her/them$_{OBV}$'

c. 't-olihtu-w-a-ni-ya-**Ø**
3-make$_{TI}$-APPL-3OBJ-N-PL-**IN.SG**
'they$_{PROX}$ make <u>it</u> for her/them$_{OBV}$'

d. 't-olihtu-w-a-ni-ya-**l**
3-make$_{TI}$-APPL-3OBJ-N-PL-**IN.PL**
'they$_{PROX}$ make <u>them$_{IN}$</u> for her/them$_{OBV}$'

(504) Passamaquoddy 3⟶3⟶3 inverse ditransitives

a. 't-oliht-a-ku-ni-ya-**l**
3-make$_{TI}$-APPL-INV-N-PL-**OBV.SG**
'she/they$_{OBV}$ make(s) <u>it</u>$_{OBV}$ for them$_{PROX}$'

b. 't-oliht-a-ku-ni-ya-**`**
3-make$_{TI}$-APPL-INV-N-PL-**OBV.PL**
'she/they$_{OBV}$ make(s) <u>them</u>$_{OBV}$ for them$_{PROX}$'

c. 't-oliht-a-ku-ni-ya-**Ø**
3-make$_{TI}$-APPL-INV-N-PL-**IN.SG**
'she/they$_{OBV}$ make(s) <u>it</u> for them$_{PROX}$'

d. 't-oliht-a-ku-ni-ya-**l**
3-make$_{TI}$-APPL-INV-N-PL-**IN.PL**
'she/they$_{OBV}$ make(s) <u>them$_{IN}$</u> for them$_{PROX}$'

These examples with three third persons really robustly reveal just how much Passamaquoddy C prefers agreeing with the lowest third person—it will skip over two higher third persons in order to index the third person theme of a ditransitive.

Thus, in Passamaquoddy, lowest preference straightforwardly extends to ditransitives, unlike in Ojibwe. Whereas in Ojibwe we need to rule out agreement with themes of ditransitives, themes of ditransitives are perfectly able to be agreed with in Passamaquoddy, and so C will always agree with them.

Wampanoag

In Wampanoag, just like in Passamaquoddy, themes of ditransitives are targetable by peripheral agreement. However, the agreement patterns in Wampanoag are regulated by the absolute-objective distinction, which we can describe in the following way: C will agree with the lowest specific third person—if there is none, C will agree with the highest argument (if third person).

But before we can begin, we need to take a moment to examine the behavior of the FORMATIVE SUFFIXES: parts of the central suffix that developed from historic nominalizers in pre-Proto-Algonquian (Goddard 1967, 1974, 2007, Proulx 1984), because in ditransitives the formative suffixes correlate exactly with which argument the peripheral suffix indexes: the highest (external argument of direct, recipient of inverse), the second-highest (recipient of direct, external argument of inverse), or the lowest (theme) (Bruening and Rackowski 2001, Oxford 2014, Xu 2022).

In Wampanoag (just like in Passamaquoddy as well as in the rest of Eastern Algonquian), there are three sets of central suffixes that differ in terms of which formative they contain: Goddard calls these the M-SUFFIXES, the W-SUFFIXES, and the N-SUFFIXES. The m-suffixes contain the formatives *-(u)m* (< PA **-(e)Hm*) with SAPs and *-ẅ* (< PA **-ẅ*)[14] with third person; the w-suffixes contain (non-umlauting) *-w* (< PA **-w*); and the n-suffixes contain *-(u)n(â)* (< PA **-(e)ne·*). I provide prefixes and central suffixes for each of these three sets in the tables below, bolding the formatives.

	SG	PL
1	*nu(t)-...**(-(u)m)**-Ø*	*nu(t)-...**-(u)m**-un*
21		*ku(t)-...**-(u)m**-un*
2	*ku(t)-...**(-(u)m)**-Ø*	*ku(t)-...**-(u)m**-wuw*
3	*...**-ẅ***	*...**-ẅ***

Table 10.1: Wampanoag prefixes + m-suffixes

	SG	PL
1	*nu(t)- ...**(-w)**-Ø*	*nu(t)- ...**-w**-un(ôn)*
21		*ku(t)- ...**-w**-un(ôn)*
2	*ku(t)- ...**(-w)**-Ø*	*ku(t)- ...**-w**(-ôw)*
3	*wu(t)-...**-Ø**-Ø*	*wu(t)-...**-w**-ô*

Table 10.2: Wampanoag prefixes + w-suffixes

	SG	PL
1	*nu(t)- ...-**(u)n**-Ø*	*nu(t)- ...-**(u)nâ**-n(ôn)*
21		*ku(t)- ...-**(u)nâ**-n(ôn)*
2	*ku(t)- ...-**(u)n**-Ø*	*ku(t)- ...-**(u)nâ**-w(ôw)*
3	*wu(t)-...-**(u)n**-Ø*	*wu(t)-...-**(u)nâ**-w(ôw)*

Table 10.3: Wampanoag prefixes + n-suffixes

You can see that the m-suffixes are characterized by the formatives *-m* and *-ẅ*, with *-m* appearing with first and second person and *-ẅ* appearing with third person (note that the prefixes never co-occur with *-ẅ*, and *-ẅ* never co-occurs with a pluralizer to the right). The w-suffixes are characterized by the formative *-w* (occasionally null due to morphophonology), and the n-suffixes are characterized by *-(u)n(â)* throughout the paradigm.

The distribution of the formatives throughout the whole verbal paradigm is complicated and subject to variation across Algonquian (see Goddard 2007, Oxford 2014, and Xu 2022 for discussion). However, in ditransitives, the pattern is quite simple: when peripheral agreement indexes the highest argument (the external argument of direct and recipient of inverse), then we get an m-suffix; when peripheral agreement indexes the middle argument (recipient of direct and external argument of inverse), we get a w-suffix; and when peripheral agreement indexes the lowest argument (the theme), we get an n-suffix. The forms with m-suffixes are absolute (peripheral suffix agrees with the highest argument), and the forms with w- and n-suffixes are objective (peripheral agreement doesn't agree with the highest argument). To differentiate the two different kinds of objective forms, I will use the terms HIGHER OBJECTIVE for agreement with the middle argument and LOWER OBJECTIVE for agreement with the lowest argument.

[14]The symbol *ẅ* stands for "umlauting" *w*, which causes preceding PA **a·* (Wampanoag *ô* /ã/) to become PA **e·* (Wampanoag *â* /a:/).

With that out of the way, let's see how peripheral agreement patterns in Wampanoag ditransitives. To help clarify the crucial parts of the examples to follow, in the description of each example number I will put nonspecific arguments in [brackets], and underline the target of peripheral agreement (if present). The result of this survey will be the following: if the lowest argument is specific, we'll get a lower objective form (n-suffix); if the lowest argument is nonspecific and the middle argument is specific, we'll get a higher objective form (w-suffix); and if both of the lower arguments are nonspecific we'll get an absolute form (m-suffix). In other words, the peripheral suffix will index the lowest specific third person, and otherwise agree with the highest argument (if third person)—an example of lowest-preference, as lower arguments have priority over higher ones.

First, let's take a look at the lower objective forms with n-suffixes. These will appear whenever the lowest argument is specific, and the properties of the higher arguments do not matter. In the most basic cases, this is when neither of the higher arguments is a potential target for peripheral agreement, whether because they're SAPs or because they are nonspecific, as in the following examples:

(505) Wampanoag SAP⟶SAP⟶3 lower objective

a.

⟨Onk	nen	John	sepet	micheme	kutunnumauunn**un**	yeu	ohke.⟩
ôk	neen	John	Sepet	mucheemee	kut-ununumaw-un-**un-Ø**	y8	ahkee
and	1SG	John	Sepet	forever	2-give$_{\text{TA+O}}$-2OBJ-**N-IN.SG**	this.IN	land

'And I, John Sepet, forever let you have this land.' (Goddard and Bragdon 1988: 43)

b.

⟨…nish	kittinnumauun**unash**…⟩
neesh	kut-ununumaw-un-**un-ash**
that.IN.PL	2-give$_{\text{TA+O}}$-2OBJ-**N-IN.PL**

'…I have given them unto thee…' Numbers 18:11 (Eliot 1685)

(506) Wampanoag SAP⟶[3]⟶3 lower objective

a.

⟨…woh	kutassamó**nuh**	pen8wot	noh	kuttinnom
wôh	kut-ahsam-ô-**n-ôh**	peenuwahty	nah	kut-anôm=
MOD	2-feed$_{\text{TA+O}}$-3OBJ-**N-OBV**	foreigner	that.PROX.SG	2-inside=

squontamtu…⟩
ushqôtâm-uhtyuw
door-LOC.PL

'…thou shalt give it unto the stranger that is in thy gates…'
Deuteronomy 14:21 (Eliot 1685)

b.

⟨…asuh	woh	kukkodtauwompamó**nuh**	pen8wot…⟩
asuh	wôh	ku-katawôpâm-ô-**n-ôh**	peenuwahty
or	MOD	2-sell$_{\text{TA+O}}$-3OBJ-**N-OBV**	foreigner

'…or thou mayest sell it unto an alien…' Deuteronomy 14:21 (Eliot 1685)

In all these examples, we have n-suffixes, and thus lower objective forms, where peripheral agreement indexes the specific theme. In these cases, this is perhaps to be expected, as all the higher arguments are either SAPs or nonspecific. Note that, despite the translation from the King James

Version, in (506), *peenuwahty* 'stranger, alien, foreigner' doesn't refer to any specific stranger, but to any stranger that may appear, and is thus nonspecific.

What might be less expected is that if there are higher specific third person arguments—and thus, higher potential targets for peripheral agreement—C still prefers indexing a specific theme.

(507) Wampanoag SAP→3→3 lower objective

a. ⟨yeu noowekontamwe anushkottummauwon**nau** nuttohtoonk nuttauwamaog⟩
y8 nu-weekôtamwee= anushkatum-aw-ô-**nâ**-w-**Ø** nut-âhtawôk nut-awâmâ-ak
this.IN.SG 1-gladly= bequeath$_{TI}$-APPL-3OBJ-**N**-3PL-**IN.SG** 1-possession 1-person-POSS-PROX.PL

'I willingly bequeath this property of mine to my kin.'
(Goddard and Bragdon 1988: 53)

b. ⟨Wame Nuttinnamawa**nanouash** Elisha…⟩
wamee nut-ununumaw-ô-**nâ**-nôn-**ash** Elisha
all 1-give$_{TA+O}$-3OBJ-**N**-1PL-**IN.PL** Elisha

'We give them all to Elisa…' (Goddard and Bragdon 1988: 158)

(508) Wampanoag 3→SAP→3 lower objective

a. ⟨yeu indianohkomuk yeu nuttinnunnummungq**unna**nannup yeug nussontimmomunnanuk⟩
y8 Indian-ahkamuq y8 nut-ununumô-q-**unâ**-nôn-up-**Ø** y8k nu-sôtyumô-m-unôn-uk
this.IN.SG Indian-land this.IN.SG 1-give$_{TA+O}$-INV-**N**-1PL-PRET-**IN.SG** this.PROX.PL 1-sachem-POSS-1.PL-ABS.PROX.PL

'This Indian land, this was conveyed to us by these former sachems of ours.'
(Goddard and Bragdon 1988: 371)

b. ⟨Yeu in God amaunau wunnetasumoh k8sheu, kah nuttinumunkq**unuh**.⟩
y8 un God amân-â-w wu-neetas-um-ah k-8hsh-uw kah nut-ununumô-q-**un-ah**
this.IN.SG thus God take.away$_{TA}$-3OBJ-3 3-animal-POSS-OBV 2-father-2PL and 1-give$_{TA+O}$-INV-**N-OBV**

'Thus God hath taken away the cattle of your father, and given them to me.'
Genesis 31:9 (Eliot 1685)

(509) Wampanoag 3→[3]→3 direct lower objective

a. ⟨…kah uppaudtao**nuh** wuskénuh…⟩
kah u-pâta-ô-**n-ôh** wushkeenuneuw-ah
and 3-bring$_{TA+O}$-3OBJ-**N-OBV** boy-OBV

'…and give it [the calf] unto a young man…' Genesis 18:7 (Eliot 1685)

(510) Wampanoag 3⟶3⟶3 direct lower objective

a.

⟨…kah	wuttinnumauo**nash**	wame	wutahtoongash.⟩
kah	wut-ununumaw-ô-**n-ash**	wâmee	wut-âhtawôk-ash
and	3-give$_{\text{TA+O}}$-3obj-**n-in.pl**	all	3-property-in.pl

'…and unto him hath he given all that he hath.' Genesis 24:36 (Eliot 1685)

b.

⟨Kah	Moses	wuttinno**nash**	Aaron	wame	wuttinnowaongash
kah	Moses	wut-un-ô-**n-ash**	Aaron	wâmee	wut-un8wâôk-ash
and	Moses	3-tell$_{\text{TA+O}}$-3obj-**n-in.pl**	Aaron	all	3-commandment-in.pl

Jehovah,	noh	an8nont…⟩
Jehovah	nah	ân8n-ô-t
Jehovah	that.prox.sg	ic.order$_{\text{TA}}$-3obj-3cj

'Then Moses told Aaron everything the Lord had sent him to say…'
Exodus 4:28 (Eliot 1685)

In (507), the recipient is third person and specific: *nutawâmâak* 'my kin' in (507a) and *Elisha* 'Elisha' in (507b), and yet C prefers skipping over it in favor of the theme. In (508–509), it's the external argument that's third person and specific, and yet, again, C prefers skipping over it in favor of the theme. Most strikingly, in (510), both of the higher arguments are specific, definite, referential third persons—and yet C prefers to ignore both of them to instead index the theme.

The only way to prevent C from indexing ditransitive themes in Wampanoag is to ensure that the theme is nonspecific. If so, then we can get a higher objective form, with w-suffixes and peripheral agreement indexing the middle argument (recipient of direct, external argument of inverse), as in the following examples where the only specific third person is the middle argument:

(511) Wampanoag SAP⟶3⟶[3] higher objective

a.

⟨nuttunumma**u**oun,	omppahinnit	Ditohwugche	ahkoh⟩
nut-ununumaw-ô-**w**-un-**Ø**	Omppahinnit	deed wuchee	ahkee
1-give$_{\text{TA+O}}$-3obj-**w**-1pl-**prox.sg**	Omppahinnit	deed for	land

'We gave to Omppahinnit a deed for land.' (Goddard and Bragdon 1988: 87)

b.

⟨…kah	kittinnumauó**og**	sampwe	wussittum8ongash…⟩
kah	kut-ununumaw-ô-**Ø-ak**	sôpwee=	wusutum8ôk-ash
and	2-give$_{\text{TA+O}}$-3obj-**w-prox.pl**	right=	judgment-in.pl

'…and gavest them right judgements…' Nehemiah 9:13 (Eliot 1685)

Here, the theme is nonspecific, the external argument is an SAP, and so the only possible target of peripheral agreement is the specific recipient.

It doesn't matter if the highest argument is a specific third person, and thus another potential target for peripheral agreement—C will still agree with a specific middle argument as long the theme is nonspecific, as in the following examples:

(512) Wampanoag 3⟶3⟶[3] direct higher objective

a. ⟨…kah wuttinnúmau**h** flocksog…⟩
kah wut-ununumaw-ô-**Ø-h** flocks-ak
and 3-give$_{\text{TA+O}}$-3OBJ-**W-OBV** flock-PROX.PL
'…and he hath given him flocks…' Genesis 24:35 (Eliot 1685)

b. ⟨…God pish wuttinnumauo**h** Pharaoh wunnohteae namp8hamáonk.⟩
God pish wut-ununumaw-ô-**Ø-h** Pharaoh wunâhtyâee= nôp8hamâôk
God MOD 3-give$_{\text{TA+O}}$-3OBJ-**W-OBV** Pharaoh peace= answer
'…God shall give Pharaoh an answer of peace.' Genesis 41:16 (Eliot 1685)

(513) Wampanoag 3⟶3⟶[3] inverse higher objective

a. ⟨…kah wutchipwodtamunkqu**oh** wuseetash…⟩
kah wu-chupwatam-ô-q**(-w)-ah** wu-seet-ash
and 3-kiss$_{\text{TI}}$-APPL-INV**(-W)-OBV** 3-foot-IN.PL
'…and [she] kissed his feet…' (lit. 'and she$_{\text{OBV}}$ kissed him$_{\text{PROX}}$ (on) his feet')
Luke 7:38 (Eliot 1685)

In (512), we have two direct forms where the peripheral suffix indexes the recipient rather than the more local specific external argument. Similarly, in (513), which is inverse, the peripheral suffix indexes the external argument rather than the more local specific recipient.

Indeed, the only way to ensure that we can ever get an absolute distransitive form, with C agreeing with the highest argument plus an m-suffix, is for all the lower arguments to be ineligible for peripheral agreement—that is, to either be SAPs or nonspecific third persons:

(514) Wampanoag 3⟶[3]⟶[3] direct absolute

a. ⟨Newutche God aninnumauau**u** wosketompoh, noh
nee wuchee God ununumaw-â-**w-Ø** washkeetôpâ-ah nah
that.IN.SG for God give$_{\text{TA+O}}$-3OBJ-**ẅ-PROX.SG** man-OBV that.PROX.SG
wanégit ut anaquabit, waantamóonk…⟩
wâneeku-t ut ânuhqâpu-t wâânutamuwôk
IC.be.good$_{\text{AI}}$-3CJ in IC.sit.before$_{\text{AI}}$-3CJ wisdom
'For God giveth to a man that is good in his sight wisdom…'
Ecclesiastes 2:26 (Eliot 1685)

b. ⟨…noh aninnumaua**u** waantamóonk waantamwoh…⟩
nah ununumaw-â-**w-Ø** wâânutamuwôk wâânutamw-ah
that.PROX.SG give$_{\text{TA+O}}$-3OBV-**ẅ-PROX.SG** wisdom wise-OBV
'…he giveth wisdom unto the wise…' Daniel 2:21 (Eliot 1685)

In these examples, only the external argument is a specific third person, and thus we get the umlauting *-ẅ* formative and peripheral agreement indexing the external argument. Strikingly, the only way to ensure that C agrees with the most local third person is for it to be the *only* eligible (i.e. specific) goal.

Finally, if the highest argument is an SAP, and the lower two arguments are not eligible for peripheral agreement (they are nonspecific or not third person), then we simply do not get any peripheral suffix at all:

(515) Wampanoag SAP⟶SAP⟶[3] absolute

a.

⟨neen	David	oks	kuttunnunnummouush	akuh	keen	Isaak	wuttuckkammen...⟩
neen	David	Oks	kut-ununumaw-ush-**Ø**	ahkee	keen	Isaak	Wuttuckkammen
1SG	David	Oks	2-give$_{\text{TA+O}}$-2OBJ-**M**	land	2SG	Isaak	Wuttuckkammen

'I, David Oks, convey to you land, you Isaak Wuttuckkammen...'

(Goddard and Bragdon 1988: 91)

b.

⟨Matta	kittinnunnummâuun8**m**w8	moskehtuash.⟩
mata	kut-ununumaw-un-8-**m**-wuw	mashkeehtyuw-ash
NEG	2-give$_{\text{TA+O}}$-2OBJ-NEG-**M**-2PL	grass-IN.PL

'I will not give you straw.' Exodus 45:18 (Eliot 1685)

(516) Wampanoag SAP⟶[3]⟶[3] absolute

a.

⟨...pâhshe	nummaumachiyeumash	nuttinninumau	matchekuog...⟩
pôhshee	nu-mômachay-um-ash	nut-ununumaw-Ø-**Ø**	macheek8-ak
half	1-goods-POSS-IN.PL	1-give$_{\text{TA+O}}$-3OBJ-**M**	poor.person-PROX.PL

'...the half of my goods I give to the poor...' Luke 19:8 (Eliot 1685)

In summary, then, C can agree with either the highest, middle or lowest argument in a ditransitive in Wampanoag, resulting in an absolute form with an m-suffix, a higher objective form with a w-suffix, or a lower objective form with an n-suffix, respectively. The choice of which argument C indexes depends on what the *lowest* specific third person is—if the lowest specific third person is the theme, C indexes the theme; if the lowest specific third person is the middle argument, C indexes the middle argument; if both the lowest arguments are nonspecific, C indexes the highest argument. Thus, just like Ojibwe and Passamaquoddy, Wampanoag C displays lowest preference (modulated by specificity-based differential argument marking).

10.2.4 Summary

As I've just justified in great depth, examination of configurations with multiple third persons reveals the following variation in peripheral agreement throughout the family (with our sample languages bolded below):

1. HIGHEST: C agrees with the highest third person.

   Languages: Arapaho, **Blackfoot**, Cree-Innu-Naskapi, Menominee, Meskwaki-Sauk-Kickapoo, Miami-Illinois

2. LOWEST: C agrees with the lowest third person...

   (A) ...full stop.

   Languages: Cheyenne, Mi'gmaq, **Passamaquoddy**, Penobscot

(B) …but not themes of ditransitives.

Languages: **Ojibwe**-Algonquin, Potawatomi, Shawnee

(C) …that is definite/specific. If all third persons are indefinite/nonspecific, C agrees with the highest argument.

Languages: Delaware, Mahican, **Wampanoag**, Western Abenaki, Proto-Algonquian

While the Highest languages like Blackfoot pose no challenge to Minimality, as C simply agrees with the most local third person (barring themes of ditransitives which are simply inaccessible to agreement), the Lowest languages are stikingly problematic: why should C prefer agreeing with a lower goal when there's a more local one that would do just as well?

10.3 Problems for previous accounts of lowest preference

Now that we've seen the full picture of how peripheral agreement varies across the family, let's now focus in on the Lowest languages. In this section, I move from verbal morphology to clausal syntax, where I seek to show that various predictions made by existing analyses of lowest preference in φ agreement—case discrimination, a low probe, and syntactic inversion—all fail to be instantiated in Algonquian.[15] This makes the issue of Algonquian lowest preference particularly problematic for the idea that Minimality constrains φ agreement (e.g. via the use of Agree in deriving φ agreement dependencies). In the sections to come, however, I will argue that all is not yet lost, and we will actually be able to derive these problematic agreement patterns in a Minimality-compliant way.

10.3.1 Case discrimination and ergative case

As discussed in Section 10.1.3, one influential method of deriving lowest preference in φ agreement is by a case-discriminating probe, only able to agree with DPs with unmarked case (Bobaljik 2008, Preminger 2014, Baker 2015, a.o.). When we combine this with an ergative-absolutive case system, where absolutive is (more-or-less) found on the lowest argument, this will result in a lowest-preferring agreement pattern.

In order to get this to work for Algonquian, we'd need to say that Algonquian languages (or at least just the Lowest languages) have (covert) ergative-absolutive case systems. One immediate discomfort of this is that Algonquian languages lack (overt) core grammatical case marking—they only have a locative marker (from Proto-Algonquian **-enki*), and Mi'gmaq has innovated a possessive/genitive suffix *-ewei* (McClay 2012, Hamilton 2015c).[16] These null ergative and absolutive cases would thus have to be pure abstract case, perhaps tied to nominal licensing.

[15] Another recent proposal specifically for Algonquian is Hammerly's (2020, 2021) analysis of lowest preference in Ojibwe in terms of the Activity Condition (see also Oxford 2014 and Xu 2022). I've already addressed this kind of analysis in Section 9.3.2, where I showed that it faces a number of empirical issues: forms where C and Infl do actually (somewhat unusually) index the same argument, the possibility of long-distance agreement in almost all Algonquian languages, and Infl-C bleeding interactions (Oxford 2015, 2017a, 2020a). I don't repeat these arguments here.

[16] Passamaquoddy has a cognate of this suffix, *-(ew)ey*, which is a nominalizing and adjectivalizing derivational suffix (e.g. *sakihwe* 'watch, watch TV/movies' ⟶ *sakihwewey* 'TV', *amsqahs* 'at first' ⟶ *amsqahsewey* 'first').

The bigger issue with the case discrimination account is the fact that peripheral agreement is not linked to syntactic role or position, as it is omnivorous. The sticking point is 3⟶SAP configurations, which do not involve syntactic inversion (despite the presence of inverse morphology): the SAP patient remains below the third person agent. In these configurations, the third person agent should be receiving ergative case, which should render it invisible to C. However, in 3⟶SAP configurations, C agrees with the third person agent, contrary to the predictions of the dependent case and case discrimination account. Thus, this cannot be the correct account of Algonquian lowest preference.

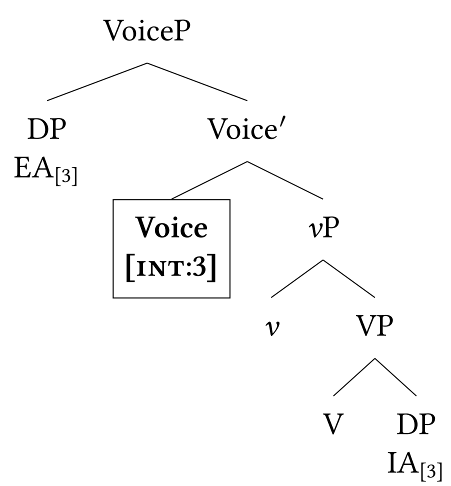
10.3.2 Low probe

A perhaps more promising approach, which allows for the possibility of omnivorous agreement, is a low probe plus Cyclic Agree (Béjar 2003, Rezac 2003, Béjar and Rezac 2009, a.o.). Under this analysis, we could place the peripheral agreement probe between the external argument and internal argument (e.g. in Voice), so that it would first see the internal argument before seeing the external argument, giving the internal argument "priority" over the external argument, while still allowing the peripheral suffix to agree with both external and internal argument, exactly as desired. However, there are at least two fatal problems with this analysis: *(i)* it cannot account for ditransitives (in Passamaquoddy and Wampanoag), and *(ii)* peripheral agreement really is demonstrably high, in C (in all the languages).

Low probe cannot account for ditransitives

To account for peripheral agreement in monotransitives, where we get peripheral agreement with the lower argument,[17] the low probe analysis would have to put the probe in Voice, as follows:

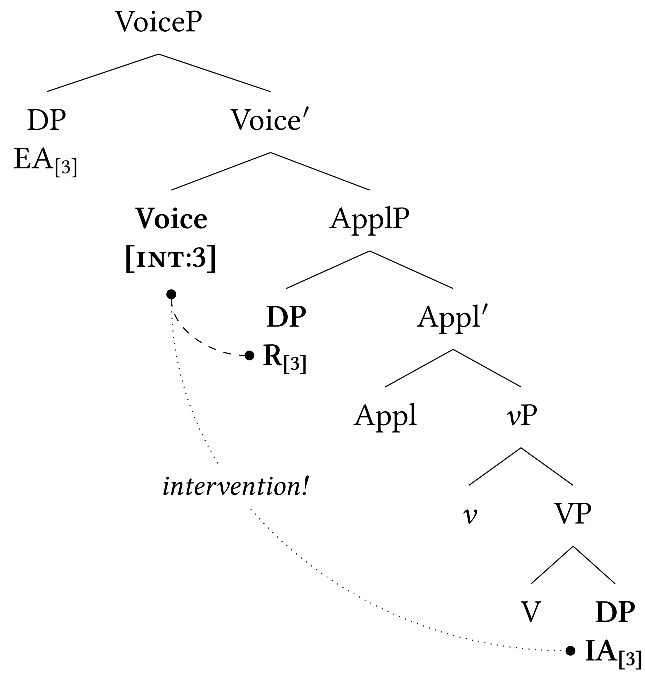
(517)



[17]In the main text I just address direct monotransitives, as there are some (solvable) complications with third person inverse monotransitives under the low probe analysis. Namely, in order to get the peripheral agreement probe in Voice to agree with the external agrument in a third person inverse derivation, we'd need Voice to first move the internal argument over the external argument to an outer specifier of VoiceP (without tucking in), bleeding agreement (see van Koppen 2005, 2007, Halpert 2012, 2015, Georgi 2014, Pietraszko 2023, a.o. on movement bleeding agreement). The external argument, being the lowest specifier of VoiceP, is now the closest goal, and thus we can derive peripheral agreement with the external argument in the third person inverse once the probe reprojects to probe into its specifier.

The problem is this: in Passamaquoddy and Wampanoag, peripheral agreement can index the theme of a ditransitive, even if the recipient is third person. However, under this structure, the recipient is an intervener for agreement with the theme:

(518)



Here, Voice cannot Agree with the internal argument, because the recipient is a closer third person target.

In order to get peripheral agreement to be able to index the theme in a ditransitive, then, we'd need to either place it even lower (e.g. in Appl or *v*)—in which case peripheral agreement wouldn't be able to agree with the external argument, as it would be too far away, a bad result—or we'd need to move the internal argument over the recipient to make it more local to Voice. This latter option finds no independent support, as on a number of diagnostics recipients in Algonquian always c-command themes and themes do not A-move over recipients (for instance, Rhodes 1990a,b, 2011 on Odawa and Bruening 2001b on Passamaquoddy). Ditransitives thus pose a serious problem to a low probe analysis of peripheral agreement, at least in those languages where the peripheral suffix can index the theme of a ditransitive (Passamquoddy and Wampanoag).

Peripheral agreement really is high

The second, perhaps even more fundamental problem with the low probe analysis is that the probe is not low. There are three reasons to accept the received generative Algonquianist wisdom that the peripheral suffix is in C (Halle and Marantz 1993, Branigan and MacKenzie 1999, Bliss 2013, Oxford 2017a, a.o.): *(i)* the Mirror Principle (Muysken 1981, Baker 1985, a.o.); *(ii)* an Ā agreement pattern we find with peripheral agreement in the conjunct; *(iii)* and the lack of peripheral agreement in CP-less clauses like the subordinative (see Part I of this thesis).

Note firsts that the peripheral suffix appears outside of tense, modal, and evidential suffixes:

(519) a. o- waabam -aa -waa -dogen **-an**
3- see$_{TA}$ -3OBJ -PL -DUB **-OBV**
'they$_{PROX}$ must have seen her/them$_{OBV}$' SW Ojibwe (Nichols 1980: 291)

b. 't- osakiy -a -wa -soponi **-l**
3- watch$_{TA}$ -3OBJ -PL -DUB **-OBV.SG**
'they$_{PROX}$ must have watched her$_{OBV}$' Passamaquoddy

c. puyô -panee **-k**
come$_{AI}$ -PRET -PROX.PL
'they$_{PROX}$ came' Wampanoag (Goddard and Bragdon 1988: 538)

This boxed slot in the verbal template hosts material like preterite (past) suffixes and dubitative suffixes (a kind of epistemic modal and/or evidential marker)—material that occupies high TAM layers. Peripheral suffixes always appear outside of these suffixes, suggesting that they are even higher, in the CP domain.

The second observation is that the peripheral suffix shows an Ā agreement pattern under various kinds of Ā extraction in Passamaquoddy, Wampanoag, and southern varieties of Ojibwe. Under the assumption that it's C that drives Ā movement, this indicates that the peripheral suffix is in C. For instance, we can see this in relative clauses, with the peripheral suffix agreeing with head of the relative clause:

(520) Ā agreement in subject relative clauses

a. Newi-w-ok [skitapi-yik tehsahq-aph-a-c-**ik** otuhk-ol].
be.four$_{AI}$-3-PROX.PL man-PROX.PL above-track$_{TA}$-3OBJ-3CJ-**PROX.PL** deer-OBV.SG
'A party of four men tracked the deer on high ground.' (lit. 'The [men that tracked the deer] were four in number.') Passamaquoddy
https://pmportal.org/dictionary/tehsahqaphal

b. ⟨Yeug kônn8nonch**eg** Pharohoh...⟩
y8k [kân8n-ô-ch-**eek** Pharoh-ah]
this.PROX.PL IC.speak.to$_{TA}$-3OBJ-3CJ-**PROX.PL** Pharaoh-OBV
'These are [they which spake to Pharaoh]...' Wampanoag (Exodus 6:27, Eliot 1685)

c. ingiw [Manidoo-g gaa= pi= miin-aa-j-**ig**
that.PROX.PL Manitou-PROX.PL IC.PST= to.here= give$_{TA+O}$-3OBJ-3CJ-**PROX.PL**
iniw Anishinaabe-n]
that.OBV Anishinaabe-OBV
'the [Manitous who gave it to the Anishinaabe]' SW Ojibwe (Sullivan 2020: 228)

These particular relative clauses are all subject relatives, and thus peripheral suffix is agreeing with the external argument of these direct monotransitive verbs, rather than with the internal argument. This is different from the typical Lowest pattern we see in these languages, indicating that we really do have Ā agreement behavior. Note that it's also possible to agree with the internal argument, provided that we have an object relative, indicating that this really is an Ā agreement pattern rather than simply a Highest agreement pattern in this particular clause type:

(521) Ā agreement in object relative clauses

a. Piyel ’-kis-onuw-a-l [sukolopan-ol wik-ahp-a-c-**il**].
Peter 3-pfv-buy$_{\text{TA}}$-3obj-obv.sg cake-obv.sg ic.like-eat$_{\text{TA}}$-3obj-3cj-**obv.sg**
‘Peter bought the [cake that he likes.]’ Passamaquoddy (GP, MA 2022.11.16)

b. ⟨Kah neemunau kalfoh neh kezheahettich**eh**...⟩
kah neemun-â-w [kalf-ah neeh keesuhe-â-hutu-ch-**eeh**]
and take$_{\text{TA}}$-3obj-3 calf-obv that.obv ic.make$_{\text{TA}}$-3obj-3pl-3cj-**obv**
‘And he took the calf which they had made…’ Wampanoag (Exodus 32:20, Eliot 1685)

c. O-gii= piibaagim-aa-n iniw [ininiw-an gaa=
3-pst= holler.at$_{\text{TA}}$-3obj-obv that.obv man-obv ic.pst=
pas-iingwe-ganaam-aa-g-**in**].
slap-face-hit$_{\text{TA}}$-3obj-3cj-**obv**
‘She hollered at the [man that she slapped].’ SW Ojibwe (Sullivan 2020: 232)

These particular conjunct verb forms that bear peripheral suffixes are traditionally called participles, a term meant to evoke the Indo-European category of nonfinite adjectivalized verbs of the same name. A classic understanding of the behavior of peripheral agreement in these participial verb forms is as a kind of nominal concord with the head noun, in line with what is often assumed for adjectival concord with the head noun (as Johansson 2011, 2013 explicitly argues for). If this classic intuition is the right analysis of this pattern, this wouldn’t be Ā agreement in C, but rather a kind of higher, DP-level concord process.

However, there are a number of arguments against a nominal concord account, as Bruening (2001b) and Reintges et al. (2006) note for Passamaquoddy: these include peripheral suffixes being able to agree with other Ā-extracted items like *wh* phrases and foci, the possibility of successive-cyclic peripheral agreement tracking the path of long-distance Ā movement, and mismatches in features between an external head and a peripheral suffix which indicate that C is agreeing with an internal head/relative operator rather than showing concord with the external head. Here, I add an additional argument against a concord analysis and in favor of an Ā agreement analysis: an argument from pied-piping.

The logic of the argument is as follows: pied-piping is a syntactic context where a head of a relative clause can differ from what is Ā extracted:

(522) the person [[whose cats] I took care of ⟨whose cats⟩]

Here, the relative head is singular *person*, but we’ve pied-piped the plural DP *whose cats* in order to form the relative clause. If peripheral agreement in relative clauses was formed by nominal concord, we’d expect singular agreement with the nominal head *person*; if peripheral agreement in relative clauses was formed clause-internal Ā agreement, we’d expect plural agreement with the pied-piped phrase *whose cats*.

Strikingly, in Passamaquoddy, Ojibwe, and Wampanoag, in these precise contexts we can agree with the pied-piped phrase:[18]

[18] This is obligatory in Passamaquoddy: in (523a), it’s ungrammatical to replace *-il* ‘obv.sg’ with either *-ik* ‘prox.pl’ or *-ihi* ‘obv.pl’ in an attempt to agree with *wenik* ‘who.pl’. This might also be obligatory in Ojibwe as well, as all the

(523) Ā agreement with pied-piping

a. Weni-k ’-posu-m-uwa-l wasis-ok kis-som-a-hti-c-**il**?
who-PROX.PL 3-cat-POSS-3PL-OBV.SG kid-PROX.PL IC.PFV-feed$_{TA}$-3OBJ-3PL-3CJ-**OBV.SG**
‘Whose.PL cat did the children feed?’ Passamaquoddy (GP, MA 2022.11.30)

b. In-gikenim-aa a’aw [gwiiwizens omaa o-maamaay-an
1-know$_{TA}$-3OBJ that.PROX.SG boy here 3-mom-OBV
enokii-ni-j-**in**].
IC.work$_{AI}$-OBV-3CJ-**OBV**
‘I know the kid whose mom works here.’ SW Ojibwe (Sullivan 2020: 242)

c. ⟨…umenuhkeeu weech8hamonat nah wuttahh8óash
u-munuhkee= weech-8hum-ô-nâ-t nah [wu-tâh-uwô-ash
3-strong= with-support$_{TA}$-3OBJ-N-LOC that.PROX.SG 3-heart-3PL-IN.PL
pannuppeyeu8g**ish** en wuhhogkat…⟩
pânupeeyuwu-k-**eesh** un w-ahakâ-t]
IC.be.perfect$_{II}$-CJ-**IN.PL** to 3-body-LOC
‘…to shew himself strong in the behalf of them whose heart is perfect toward him.’
Wampanoag (2 Chronicles 16:9, Eliot 1685)

In the Passamaquoddy example in (523a), we find peripheral agreement with pied-piped *’posumuwal* ‘their cat’, rather than with the possessor *wenik* ‘who.PL’. In the Southwestern Ojibwe example in (523b), we get peripheral agreement with the possessum *omaamaayan* ‘his mom’, rather than with the relative head *gwiiwizens* ‘boy’. Finally, in the Wampanoag example in (523c), we see peripheral agreement with *wutâhuwôash* ‘their hearts’, rather than with the (null) head ‘they (whose)’. This is exactly the pattern we’d expect under an Ā-agreement analysis, and not what we’d expect under a nominal concord analysis.

In these Lowest languages, then, the peripheral suffix can index the φ features of something that has Ā moved, which I argued is a genuine instance of Agree with an Ā-extracted constituent (rather than nominal concord). If we make the standard assumption that C is the host of the relevant Ā probe that drives relativization, *wh* movement, focus movement, and so on (for some justification of this for Passamaquoddy see Chapter 5), then this indicates that the peripheral suffix must also be in C—much higher than where the low probe analysis would want it.

The third and final argument that the peripheral suffix must be high comes from clauses that lack a CP layer—subordinative clauses. Part I of this thesis extensively argues that subordinative clauses in Passamaquoddy lack CP layers and are bare TPs. Wampanoag also has subordinative clauses, and the contexts for them are remarkably similar to subordinative contexts in Passamaquoddy, such as under situation and event complement predicates (Norvin Richards, p.c.). I think it’s reasonable to assume, at least as a null hypothesis (pending further investigation), that subordinative clauses in Wampanoag are also missing a CP layer. The relevant point here is that subordinative verb forms, in both Passamaquoddy and Wampanoag (as well as generally

examples I have been able to find of possessor extraction where we can clearly differentiate peripheral agreement with the possessor from peripheral agreement with the possessum show peripheral agreement with the possessum (Valentine 2001: 585, ex. 189, Sullivan 2020: 182, ex. 202). I am not sure about Wampanoag: more investigation is needed.

across Eastern Algonquian), lack peripheral suffixes entirely. This fact comes for free if peripheral suffixes spell out C—but if they're actually lower, as per the low probe analysis, it becomes a mystery why CP-less clauses should lack peripheral suffixes. All in all, the low probe analysis cannot be upheld, as peripheral suffixes really are high.

10.3.3 Syntactic inversion

The final pre-existing analysis of anti-Minimality effects I discuss here is the syntactic inversion analysis, under which a step of movement that places originally lower DPs above higher ones feeds agreement (Myler 2017, Colley 2018, a.o.). In contrast to the low probe account, this allows us to keep the peripheral suffix high, sidestepping one of the major issues with that analysis of peripheral agreement. However, the core problem with the syntactic inversion account is that the evidence for argument-rearranging movement operations that we do have is systemically the *opposite* of what this analysis requires. For instance, in 3⟶3 direct scenarios, the peripheral suffix indexes the object, and thus the syntactic inversion account would require the object to move over the external argument. However, there is abundant evidence that there is no such movement step in direct scenarios (see Section 2.4.3 for evidence from long-distance agreement, quantifier scope, and variable binding). Conversely, the syntactic inversion account would predict that the external argument should c-command the internal argument in 3⟶3 inverse scenarios, in order to derive peripheral agreement with the external argument. But again, there is abundant evidence *against* this conclusion, and instead for the conclusion that in the 3⟶3 inverse the internal argument moves over the external argument (again, see Section 2.4.3 for evidence from long-distance agreement, quantifier scope, variable binding, and reconstruction). In every case, independent syntactic diagnostics show us that the relevant c-command relationships between arguments are exactly the *opposite* of what the syntactic inversion account of lowest-preference predicts. Thus, this cannot be the right analysis of lowest preference in Algonquian.

10.4 Expone Outermost

So what are we to do? It seems that peripheral agreement in the Lowest languages displays recalcitrant anti-Minimality that cannot be analyzed away using any pre-existing theoretical machinery. Do we have to give up the idea that φ agreement is subject to Minimality constraints?

In this section, I argue that we don't. What's more, we don't even have to invent any new theoretical apparatus to analyze Algonquian lowest-preference. I show that existing analyses of the morphological outcomes of multiple case assignment naturally extend to the domain of (multiple) agreement, and can straightforwardly derive the kind of lowest-preference we find in Algonquian. The core insight is that the syntactic result of multiple valuation (whether that's multiple case assignment or multiple agreement) must be ordered, and that particular heads can be parametrized to only expone the last-assigned feature bundle—Expone Outermost.

10.4.1 A detour to the land of case

To get to our final conclusion, we must first pass through the land of case. The literature on case has shown that it's possible for a single nominal to have been assigned multiple case values over the course of the syntactic derivation (Béjar and Massam 1999, Richards 2012, Pesetsky 2013, Levin 2017, Chen 2018, Caha 2022, a.o.). In the most straightforward instances of this, all these multiple cases can be exponed on the surface—a phenomenon often called CASE STACKING (Richards 2012, Levin 2017, Chen 2018, Caha 2022). In some languages, this arises due to a kind of concord process: in Lardil (Tangkic), case spreads throughout the DP, and thus nominal modifiers can get assigned case multiple times (Richards 2012; we also see the same process in the related Tangkic language Kayardild, Evans 1995, 2003, Round 2013):

(524) Lardil case stacking

a. Ngada latha karnjin-i **marun-ngan-ku** maarn-ku.
   1SG spear wallaby-ACC **boy-GEN-INST** spear-INST
   'I speared the wallaby with the boy's spear.' (Richards 2012: 43)

b. Kara nyingki kurri kiin-i mutha-n thungal-i, **ngithun-i** kirdi-thuru-Ø?
   Q 2SG see that-ACC big-ACC tree-ACC **1SG.GEN-ACC** cut-FUT-ACC
   'Do you see that big tree, which I am going to cut down?' (Richards 2012: 47)

Thus, in (524a), we get *-ngan* 'GEN' marking *marun-* 'boy' as genitive, and *-ku* 'INST' stacked on top showing concord with *marrnku* 'with the spear'. Similarly, the genitive subject of the relative clause 'which I am going to cut down', *ngithun* '1SG.GEN', is combined with *-i* 'ACC', showing concord with the head of the relative clause *mutha-n thungal-i* 'big-ACC tree-ACC'. In both of these cases, the relevant nominal has gotten two case values over the course of the syntactic derivation, and both of these case values are spelled out on the surface.

In other languages, a nominal can be assigned one case, then A-move into another case position, and get assigned a second case. Korean (Koreanic) and Amis (Austronesian) are two languages where this can be transparently visibile on the surface—though, interestingly, in both cases this is only possible under certain informational-structural conditions: focus in Korean and contrastive topic in Amis. For instance, in Korean, it's possible to stack nominative or accusative case on top of dative (Gerdts and Youn 1988, 1989, Schütze 2001, Yoon 2004, Levin 2017, a.o.):

(525) Korean case stacking

a. **Cheli-hanthey-ka** ton-i isse.
   Cheli-DAT-NOM money-NOM have
   'Cheli has money.' (Levin 2017: 448)

b. Swunhi-ka **Yenghi-hanthey-lul** chayk-ul cwuesse.
   Swunhi-NOM **Yenghi-DAT-ACC** book-ACC gave
   'Swunhi gave Yenghi the book.' (Levin 2017: 448)

Levin (2017) argues that this is triggered by movement: in certain constructions dative is assigned within the VP phase, and then if the relevant argument moves out into the TP phase, it gets assigned case again (either nominative or accusative, depending on whether it's the highest argument in the TP phrase).

We find similar data in Amis (Chen 2018), with the additional possibility that raising-to-object can also feed case stacking:

(526) Amis case stacking

a.

Kirami,	caay	ho	ka-foti’	**ko-no-ya**	**wawa**.
but	NEG	still	STV-sleep	**NOM-GEN-that**	**child**

‘But that child is not sleeping yet.’ (Chen 2018: 186)

b.

Ma-fana’	kako	**to-ko-no**	**tawki**	mi-tangtang	to	kalang.
IPFV.STV-know	1SG.NOM	**ACC-NOM-GEN**	**boss**	IPFV.AV-cook	ACC	crab

‘I know that the boss, she’s cooking the crabs.’ (Chen 2018: 198)

In (526a), Chen argues that *ya wawa* ‘that child’ is first assigned genitive within the *v*P, and then assigned nominative once it has moved out into the CP domain—thus, we get both genitive and nominative (under constrative topic). In (526b), *tawki* ‘boss’ has undergone that derivation in the embedded clause, and then raises to object, getting assigned a third case, accusative—and all three case values are visible on the surface.

But outside of focus and contrastive topic, these DPs generally only show one case on the surface.[19] For instance, typically in Korean you only pronounce one of the stacked cases (but either one is possible):

(527) Korean DAT-NOM case stacking: can realize either case

a.

Cheli-hanthey	ton-i	isse.
Cheli-DAT	money-NOM	have

b.

Cheli-ka	ton-i	isse.
Cheli-NOM	money-NOM	have

Both: ‘Cheli has money.’ (Levin 2017: 474)

(528) Korean DAT-ACC case stacking: can realize either case

a.

Swunhi-ka	**Yenghi-hanthey**	chayk-ul	cwuesse.
Swunhi-NOM	**Yenghi-DAT**	book-ACC	gave

b.

Swunhi-ka	**Yenghi-lul**	chayk-ul	cwuesse.
Swunhi-NOM	**Yenghi-ACC**	book-ACC	gave

Both: ‘Swunhi gave Yenghi the book.’ (Levin 2017: 474)

Recall that Levin (2017) proposes that these case-alternating DPs are first assigned dative within the VP, and then move out of the VP phase to be assigned either nominative or accusative in the higher phase, via a dependent case mechanism (Marantz 1991, Baker 2015, a.o.). He argues that this particular multiple-case-assigning derivation can (and usually does) result in spelling out only one case value, and the grammar allows both choices of inner or outer case. In support of this conclusion, Levin demonstrates that when the relevant DP surfaces with (only) the outer case (nominative or accusative), it shows the syntactic and semantic properties associated with having moved to a higher position, and when the relevant DP surfaces with (only) the inner case, it could have either remained low or moved high. Thus, if the nominal remains low, it can only surface

[19] I just focus on Korean here; the case of Amis is slightly more complicated in ways that don’t concern us, so I won’t discuss it—I refer the interested reader to Chen (2018).

with the inner case (dative); if it moves high, it can surface with just the inner case, just the outer case, or both cases (under focus). The choice between these last three options is morphological, not syntactic—the underlying syntactic derivation (the number and identity of cases assigned) is the same for all three options, and the only difference is the surface pronunciation.

If it's possible for a DP with multiple case features to only realize one of those features on the surface, we would predict, all else being equal, that there should be languages where this is the *only* morphological option available. Indeed, Pesetsky (2013) proposes exactly such a thing in his analysis of Russian numerals and case morphology, where he argues that only the outermost case gets pronounced (the One-Suffix Rule, "Delete all but the outermost case suffix", Pesetsky 2013: 11). In syntactic domains more parallel to those found in Korean and Amis, we can find cases of A movement where only the outermost case is realized. For instance, in Niuean (Polynesian) hyperraising, nominals that are assigned ergative in an embedded finite clause can raise out into the matrix clause and get their ergative case "overwritten" with absolutive, both in raising to subject as well as raising to object structures (Seiter 1980, Massam 1985):

(529) Raising to subject

a. To maeke [ke lagomatai **he** **ekekafo** e tama ē]. No raising
FUT possible SBJV help **ERG** **doctor** ABS child this
'The doctor could help this child'.

b. To maeke **e** **ekekafo** [ke lagomatai *t* e tama ē]. Raising
FUT possible **ABS** **doctor** SBJV help ABS child this
'The doctor could help this child.' Niuean (Seiter 1980:158)

(530) Raising to object

a. To nākai toka e au [ke kai **he** **pusi** e ika]. No raising
FUT not let ERG 1SG SBJV eat **ERG** **cat** ABS fish
'I won't let the cat eat the fish'.

b. To nākai toka e au **e** **pusi** [ke kai *t* e ika]. Raising
FUT not let ERG 1SG **ABS** **cat** SBJV eat ABS fish
'I won't let the cat eat the fish'. Niuean (Seiter 1980:196)

In the (a) examples, we have sentences without raising, and we can see that the embedded subject receives ergative case. When the embedded subject raises out, either to subject or object positions (both of which would receive absolutive case) as in the (b) examples, we can see that the embedded subject appears with *absolutive* case instead of ergative (see Seiter 1980 and Massam 1985 for arguments that this really does involve raising). Given that the hyperraised DP in these examples receives ergative if it stays low, it's reasonable to assume that *ekekafo* 'doctor' and *pusi* 'cat' get assigned two cases over the course of the syntactic derivation in the raising examples, only for the last, outermost case to be realized morphologically.

A perhaps even more compelling example of this comes from Romanian (Romance) hyperraising to object, as exemplified below:

(531) a.

Am	ghicit	[	că	**Mihai**	își	aranjează	plecarea	].
have.1SG	guessed		that	**Mihai**	REFL.DAT	arrange.3SG	leave.DEF	

‘I figured out that Mihai is arranging his leave.’

b.

L=am	ghicit	**pe**	**Mihai**	[	că	*t*	=și	aranjează
him.ACC=have.1SG	guessed	**DOM**	**Mihai**		that		=REFL.DAT	arrange.3SG

plecarea	].
leave.DEF	

‘I figured out that Mihai is arranging his leave.’ Romanian (Alboiu and Hill 2016:257)

(532) a.

Am	văzut	[	că	**lui**	**Ion**	**i**=a	fost	foame	].
have.1SG	seen		that	**the.DAT**	**Ion**	**him.DAT**=have.3SG	been	hunger	

‘I saw that Ion was hungry.’

b.

L=am	văzut	**pe**	**Ion**	[	că	*t*	**i**=a	fost	foame	].
him.ACC=have.1SG	seen	**DOM**	**Ion**		that		**him.DAT**=have.3SG	been	hunger	

‘I saw that Ion was hungry.’ Romanian (Alboiu and Hill 2016: 269)

The (a) examples above serve as a baseline, with the embedded subject surfacing downstairs—a nominative subject in (531a), and a quirky dative subject in (532a). In the (b) examples, the embedded subject surfaces upstairs, to the left of the complementizer, marked with the differential object marker *pe* and doubled by an accusative clitic. Alboiu and Hill (2016) argue extensively that these constructions do not involve prolepsis or control, and that the embedded clause is truly finite and able to assign case to the embedded subject—these are thus instances of hyperraising to object. They conclude that the embedded subject is assigned case twice in the derivation: once downstairs and again upstairs.

The most striking fact about Romanian is that in certain cases we can find clear traces of the raised DP's lower case. In (532b), where we're raising a downstairs quirky dative to a matrix accusative position, we can find traces of *Ion*'s dative past life on the downstairs dative clitic *i=* 'him.DAT'. However, only the matrix case is realized on *Ion* with the differential object marker *pe*, and we don't find the dative article *lui*. From this, we can conclude that *Ion* really was assigned dative downstairs (visible on the downstairs dative clitic), then moved into the matrix clause and was assigned accusative upstairs. In Romanian, just like in Niuean, multiple case marking results in only the outermost case being realized on the surface.

There are two important properties to note at this point, one formal and one conceptual. The formal point is that, in order to even state rules like "expone the outermost case", the representation of multiple cases on a DP must be *ordered*. Thus, instead of a(n unordered) set of case features like {GEN, NOM, ACC, ...}, we'd minimally need an ordered list, which I represent using angle brackets: ⟨GEN, NOM, ACC, ...⟩. Of course, there are other alternatives, such as a tree structure, for which we can use c-command to impose an order: [... ACC [NOM [GEN]]]. However, for the purposes of this thesis, the precise implementation of ordering/asymmetry between feature bundles does not matter, so for simplicity I represent ordering of feature bundles with an ordered list. Additionally, this must reflect the derivational order in which the feature bundles were obtained—thus, if a DP is first assigned dative and then nominative, we can represent the result of this as ⟨[DAT], [NOM]⟩, with dative case preceding nominative case in the ordering.

The conceptual point I'd like to make is that whichever case gets pronounced is fundamentally a surface *morphological* property, which can parametrically vary across languages (or across particular constructions/heads). There's nothing particularly case-specific about the mechanisms involved, as already noted by Pesetsky (2013: Ch. 9). We can just as easily say that whenever *any* phrase obtains multiple feature values over the course of a derivation, resulting in an ordered list of feature bundles, there's a choice to make at the morphology: do we realize all feature bundles? only one? which one? and so forth. Indeed, we would need some kind of additional stipulation to restrict these kinds of morphological operations solely to the domain of case. We can generalize this outcome from the land of case to the more general rule of Expone Outermost:

(533) *Expone Outermost*

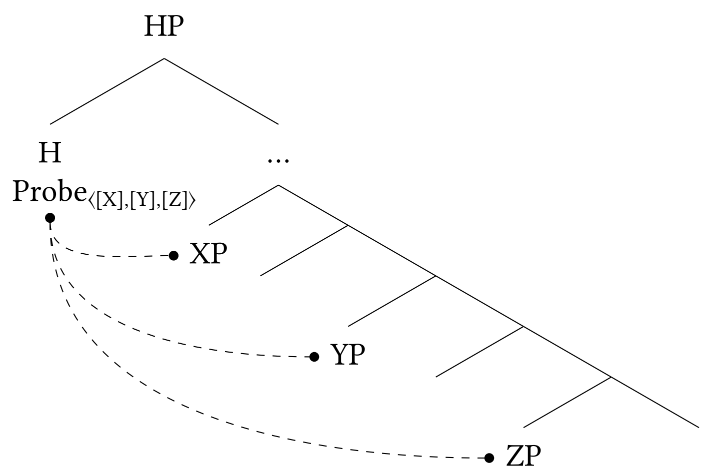
On a multiply-valued head $\mathrm{H}_{\langle[\mathrm{A}],\,[\mathrm{B}],\,\ldots\,[\mathrm{Z}]\rangle}$, expone only the outermost feature bundle: $\mathrm{H}_{[\mathrm{Z}]}$.

So, we should expect to see similar cases of exponing only the outermost feature bundle in other syntactic domains—for instance, multiple agreement.

10.4.2 Back to agreement

Turning back to the land of φ agreement, recall that it's possible for a single head to agree with multiple goals, as discussed in Section 10.1.3—we find this in Nez Perce and Inuit, for instance. The tree in (534) illustrates this in the abstract:

(534)



Here, a probe on H has agreed with all of XP, YP, and ZP, and copied over their features, resulting in a probe containing an ordered list of feature bundles ⟨[X], [Y], [Z]⟩. In the most transparent case, this would result in all three feature bundles being exponed on H.

However, if Expone Outermost is in action, then we'd only expone the *last* feature bundle acquired—the features copied from ZP. The surface result of this is agreement with the least local goal—lowest preference. However, the syntactic derivation of this pattern is entirely Minimality-obeying—the probe on H probes its search space from closest to furthest, agreeing with every matching goal. Note that we haven't invented any new syntactic or morphological mechanism—we've just extended pre-existing machinery from the land of case to the land of φ agreement. In this way, (surface) anti-Minimality effects in φ agreement are actually *predicted*: they come for free from this particular combination of pre-existing and independently-motivated parts: multiple φ agreement followed by Expone Outermost. Indeed, we'd need some kind of extra principle to rule out this combination, and it's not entirely clear what that would be (or even if that would be desirable in the first place).

Thus, Expone Outermost combined with multiple φ agreement is another path to lowest-preference, in addition to case-discrimination, a low probe, and syntactic inversion. Additionally, it's a *morphological* route to lowest preference, in contrast to the syntactic routes that the previous literature has explored. Thus, it makes different syntactic predictions than the other accounts: it doesn't depend on null case marking, placing the probe low, or unjustified reshuffling of arguments. In the remainder of this chapter, I show how this analysis applies to Algonquian, demonstrating that it's able to account for all the properties of Algonquian lowest preference. I also show how we can use the Expone Outermost analysis of lowest-preference to account for variation across the family along the lines of variation in object shift in in Germanic (Holmberg 1986, Diesing 1992, 1996, Thráinsson 2001, a.m.o.) and Inuit (Woolford 2017, Yuan 2022). I then broaden my horizons and discuss further consequences and predictions of this account in other languages, as well as its broader typological implications.

10.4.3 Applying Expone Outermost to Algonquian

Let's first remind ourselves of the four kinds of peripheral agreement patterns we find across Algonquian:

1. Highest: C agrees with the highest third person. (Blackfoot)
2. Lowest: C agrees with the lowest third person…
   (A) …full stop. (Passamaquoddy)
   (B) …but not themes of ditransitives. (Ojibwe)
   (C) …that is definite/specific. If all third persons are indefinite/nonspecific, C agrees with the highest argument. (Wampanoag)

In all Algonquian languages, the peripheral agreement probe is relativized to third persons. We find the most straightforward instantiation of this in the Highest languages like Blackfoot: C simply agrees with the most local third person. In an Interaction-Satisfaction model of Agree (Deal 2015a, 2022), we can represent this as [int:3,sat:3].

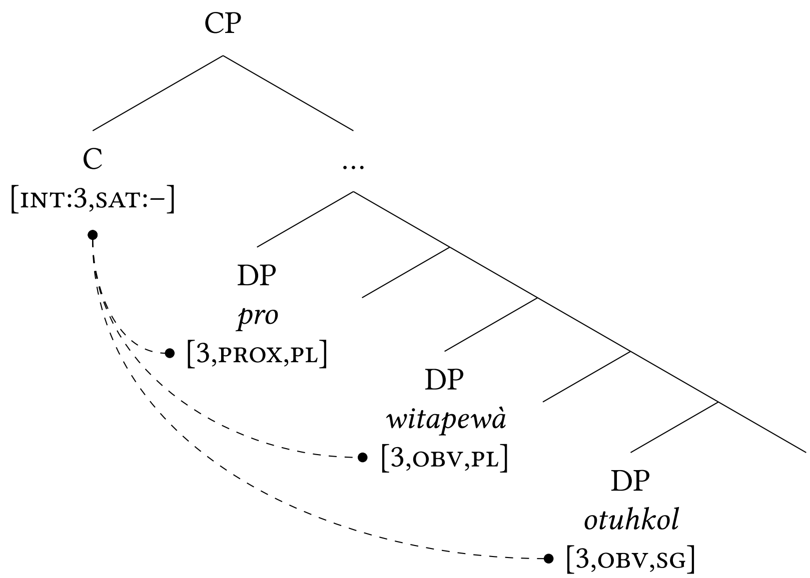
For the Lowest languages, the general approach will be to specify the peripheral agreement probe to insatiably probe for third person, copying over the features from all third person goals within the search domain: [int:3,sat:–]. Then, we specify C to Expone Outermost, resulting in the features from the *lowest* third person being spelled out, deriving lowest preference. This approach faces none of the issues of the other analyses. We can correctly capture the omnivority of peripheral agreement, something that was not possible under the case-discrimination analysis. We can also correctly capture the fact that peripheral agreement is high, in C, which was impossible under the low probe analysis. And, lastly, we do not need to posit steps of syntactic inversion for which there is no evidence, unlike the syntactic inversion analysis.

This analysis as it stands straightforwardly works for Passamaquoddy-type languages, which show no restrictions on peripheral agreement. For instance, consider the following sentence:

(535) ’T-ol-pawotu-w-a-niy-a-**l** <u>otuhk-ol</u> w-itape-wa-\`.
3-there-chase$_{\text{TI}}$-APPL-3OBJ-N-PL-**OBV.SG** <u>deer-OBV.SG</u> 3-friend-PL-OBV.PL
‘They flushed <u>the deer</u> out toward their friends.’
https://pmportal.org/dictionary/olpawotuwanol

Here, the external argument is proximate plural, the recipient is obviative plural, and the theme is obviative singular—and thus we get obviative singular peripheral agreement. Abstracting away from the word order and cutting out unnecessary details of the tree, (536a) illustrates the proposed syntactic derivation, and (536b) the morphological outcome:

(536) a. *Multiple agreement*



b. ⟨[3,PROX,PL],[3,OBV,PL], $\boxed{\text{[3,OBV,SG]}}$⟩ ↔ *-ol* ‘OBV.SG’ *Expone Outermost*

In the syntax, C agrees insatiably with all third person goals in its search domain sequentially, from most to least local (536a). In this sentence, there are three such matching goals: the null 3PL external argument, the recipient *witapewà* ‘their friends’, and *otuhkol* ‘deer.OBV’. C copies over all their features in an ordered list. Then, once it comes time to spell C out, Expone Outermost kicks in, and we select only the outermost feature bundle to realize morphologically (536b), resulting in the surface appearance of only having agreed with the theme *otuhkol* ‘deer.OBV’—lowest preference. In the syntax, however, there isn’t any lowest preference or anti-Minimality: C has simply agreed with multiple DPs.

While this approach works straightforwardly to account for languages like Passamaquoddy, it needs to be tweaked in order to account for the restrictions on peripheral agreement found in languages like Ojibwe and Wampanoag: how do we prevent C from agreeing with themes in Ojibwe, and how do we make C sensitive to specificity in Wampanoag? To answer this question, we can borrow insights from Bruening and Rackowski (2001) and Xu (2021), who propose that the specificity-based peripheral agreement pattern can be accounted for along the lines of Germanic object shift, by moving specific DPs into view of a probe on C. As Diesing (1992) and Bhatt and Anagnostopoulou (1996) (among many others) propose, specific objects move out of the VP, which Diesing (1992) and Diesing and Jelinek (1995) argue is due to semantic reasons:

(537) a. [$_{\text{TP}}$ SUBJ [$_{\text{VP}}$ … **OBJ$_{[-\text{SPEC}]}$** …]] *nonspecific object, no shift*

b. [$_{\text{TP}}$ SUBJ **OBJ$_{[+\text{SPEC}]}$** [$_{\text{VP}}$ … *t* …]] *specific object, shift*

In some languages, this just has word order effects—for instance, in German (Germanic), unstressed object pronouns must precede VP adverbs and negation:

(538) a. *…weil ich $\boxed{\text{selten}}$ **sie** streichle.
since I $\boxed{\text{seldom}}$ **her** pet
Intended: '…since I $\boxed{\text{seldom}}$ pet **her**.'

b. …weil ich **sie** $\boxed{\text{selten}}$ streichle.
since I **her** $\boxed{\text{seldom}}$ pet
'…since I $\boxed{\text{seldom}}$ pet **her**.' German (Diesing and Jelinek 1995: 131)

(539) a. *…weil ich $\boxed{\text{nicht}}$ **sie** gestreichelt habe.
since I $\boxed{\text{not}}$ **her** petted have
Intended: '…since I have $\boxed{\text{not}}$ petted **her**.'

b. …weil ich **sie** $\boxed{\text{nicht}}$ gestreichelt habe.
since I **her** $\boxed{\text{not}}$ petted have
'…since I have $\boxed{\text{not}}$ petted **her**.' German (Diesing and Jelinek 1995: 131)

In (538), we see that the object pronoun *sie* 'her' must precede the VP adverb *selten* 'seldom', and in (539), we see that it has to precede *nicht* 'not'.

In other languages, this has case-related effects. For instance, in Sakha (Turkic), accusative case marking correlates with object shift and specificity, as noted by Baker and Vinokurova (2010):

(540) a. Masha $\boxed{\text{türgennik}}$ **salamaat-(#y)**[21] sie-te.
Masha $\boxed{\text{quickly}}$ **porridge-ACC** eat-PST.3SG
'Masha ate **porridge** $\boxed{\text{quickly}}$.'

b. Masha **salamaat-*(y)** $\boxed{\text{türgennik}}$ sie-te.
Masha **porridge-ACC** $\boxed{\text{quickly}}$ eat-PST.3SG
'Masha ate **the porridge** $\boxed{\text{quickly}}$.' Sakha (Baker and Vinokurova 2010: 602)

In (540a), we can see that if the object *salamaat* 'porridge' appears after the VP adverb *türgennik* 'quickly', it cannot appear with accusative case (though see fn. 21) and it gets a nonspecific interpretation. In contrast, if the object *salamaat* 'porridge' has shifted to the left of the adverb (540b), it now *must* appear with accusative case and it receives a specific interpretation. Thus, specific objects move out of the VP, and in doing so receive accusative case. Baker and Vinokurova (2010) and Baker (2015) propose that this connection arises because dependent accusative case is assigned within TP, and material that remains inside the VP phase is invisible to the dependent

[21] Accusative on *salamaat* 'porridge' here is possible only under contrastive focus. See Vinokurova (2005) for some discussion.

accusative case rule in Sakha. Thus, a low nonspecific object will be invisible to the dependent accusative case rule, receiving default nominative case, whereas a shifted specific object comes into the domain of dependent accusative.

The logic of this account isn't restricted to case, as many kinds of syntactic phenomena show locality effects of the sort captured by phases, where material wihin a certain domain is inaccessible for higher syntactic operations. Thus, this account can naturally extend to specificity effects in agreement: specific objects move out of the VP phase into the search domain of a higher probe, whereas nonspecific objects remain in VP and thus cannot be targeted by a higher probe.

Xu (2021) proposes exactly that for Delaware (Eastern Algonquian), a language with a peripheral agreement pattern just like that found in Wampanoag (see also Colley 2018, who also proposes that specificity-based object shift can feed agreement in Erzya Mordvin (Uralic), though for him the relevant movement places object *above* the external argument, something he doesn't independently justify). For Xu, specific objects move out of the VP phase into the specifier of VoiceP, becoming visible to C. Under our particular analysis of Lowest languages, with C being an insatiable third person probe, this results in the following kinds of syntactic derivations:

(541) a. $[_{\text{CP}}\ \mathbf{C}_{[\textsc{int}:3,\textsc{sat}:-]} \dots [_{\text{VoiceP}}\ \mathbf{EA}_{[3]}\ \text{Voice}\ [_{v\text{P}} \dots \text{IA}_{[3,-\textsc{spec}]} \dots]]]$ *3⟶3 direct absolute*

b. $[_{\text{CP}}\ \mathbf{C}_{[\textsc{int}:3,\textsc{sat}:-]} \dots [_{\text{VoiceP}}\ \mathbf{EA}_{[3]}\ \mathbf{IA}_{[3,+\textsc{spec}]}\ \text{Voice}\ [_{v\text{P}} \dots t \dots]]]$ *3⟶3 direct objective*

We assume that Voice is a phase head, and that C thus cannot probe into the complement of Voice. Nonspecific objects remain inside *v*P, outside of the purview of C, and thus C cannot agree with them, only being able to agree with a third person external argument (541a). This results in an absolute verb form, with peripheral agreement not indexing the lower argument. In contrast, specific objects shift out of the VP phase into a specifier of VoiceP, and thus C is able to see them and Agree with them (541b). C in this case will copy over two feature bundles, one from the external argument and another from the internal argument, and Expone Outermost results in the internal argument's features being spelled out, giving us an objective form. Note that, in order to preserve the c-command relationships between the external and internal argument and have the right ordering of feature bundles on C, the internal argument here must tuck in.

I illustrate these two derivations below, with a near-minimal pair of Wampanoag sentences:

(542) a.

⟨newitche		konuh	ahtow**aug**	nesnash	shanash⟩	*absolute*
nee	wuchee	ukanuh	ahtôw-Ø-**ak**	neesun-ash	shan-ash	
that.IN.SG	for	DEM.PROX.PL	have$_{\text{TI}}$-3-**PROX.PL**	two-IN.PL	share-IN.PL	

'Therefore these [people] have two shares.'

Wampanoag (Goddard and Bragdon 1988: 109)

b.

⟨koshkuhtaukquainnin	shanuh	wutahtauwun**ash**	mitcheme⟩	*objective*
Koshkuhtaukquainnin	shanuh	wut-ahtaw-un-**ash**	mucheemee	
Koshkuhtaukquainnin	DEM.IN.PL	3-have$_{\text{TI}}$-N-**IN.PL**	forever	

'Koshkuhtaukquainnin has these forever.'

Wampanoag (Goddard and Bragdon 1988: 257)

Example (542a) corresponds to the absolute derivation in (541a): the nonspecific object *neesunash* *shanash* 'two shares' remains inside *v*P, and thus C can only agree with the external argument *ukanuh* 'these [people]', resulting in an absolute verb form with peripheral agreement indexing the proximal plural external argument. In contrast, (542b) coresponds to the objective derivation in (541b): the specific object *shanuh* 'these.IN' has moved out of *v*P, and thus C can agree with both the external argument *Koshkuhtaukquainnin* as well as the internal argument *shanuh* 'these.IN'. By Expone Outermost, peripheral agreement realizes only the inanimate plural features copied from *shanuh* 'these.IN', giving us an objective form. This kind of analysis naturally extends to other configurations of arguments and other kinds of absolute and objective verb forms (I refer the interested reader to Xu 2021 for the details, especially for the analysis of absolute and objective inverse forms).

The core insight from Wampanoag and the other languages with an absolute-objective distinction is that we can tie variation in what C agrees with to which arguments have escaped the VP phase, with the resulting picture being that peripheral agreement will index the lowest third person argument that has escaped the VP phase. In languages like Wampanoag, we see this kind of variation within a single language, depending on which arguments are specific. However, we can apply the same kind of logic to the other Lowest languages, allowing us to capture variation across languages. In Passamaquoddy, we find no specificity effects: the lowest third person argument always gets indexed by the peripheral suffix, no matter what. In this respect, Passamaquoddy looks like Wampanoag if third person arguments were always specific, and thus all arguments moved to Spec,VoiceP. In Ojibwe, we similarly find no specificity effects, but themes are never agreed with. In this respect, Ojibwe looks like Wampanoag if all arguments except themes were specific, and thus all arguments except themes move to Spec,VoiceP.

The variation across these three classes of Lowest languages thus boils down to variation in terms of which arguments shift:

- **Passamaquoddy:** all arguments move to Spec,VoiceP
- **Ojibwe:** all arguments except for themes move to Spec,VoiceP
- **Wampanoag:** specific arguments move to Spec,VoiceP

Formally, we can localize this variation to different specifications of movement-driving probes in Voice. In Passamaquoddy, we can say that Voice moves all DPs; in Ojibwe, we can say that Voice moves the highest DP; and in Wampanoag, we can say that Voice moves only specific DPs. We can specify these probes in the following way, with F^{M} indicating that interaction/satisfaction with the feature F causes the goal that bears F to move:

(543) Movement-driving probe specifications

a. Passamaquoddy: [INT:D^{M},SAT:–]

b. Ojibwe: [INT:D^{M},SAT:D]

c. Wampanoag: [INT:SPEC^{M},SAT:–]

The probe in Passamaquoddy will insatiably move all DPs it finds in the complement of Voice, the probe in Ojibwe will just move the first DP it finds and then stop, and the probe in Wampanoag will insatiably move all specific DPs it finds.

In a direct ditransitive with all third person arguments, we will thus get the following kinds of derivations in Passamaquoddy (544) and Ojibwe (545), with D standing for donor, R for recipient, and T for theme:

(544) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{R}_{[3]}\ \mathbf{T}_{[3]}\ \mathbf{Voice}_{[\text{INT:D}^{\text{M}},\text{SAT:–}]}\ [_{\text{ApplP}}\ t\ \text{Appl}\ [_{v\text{P}}\ \ldots\ t\ \ldots\ ]]]]$

Passamaquoddy

(545) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{R}_{[3]}\ \mathbf{Voice}_{[\text{INT:D}^{\text{M}},\text{SAT:D}]}\ [_{\text{ApplP}}\ t\ \text{Appl}\ [_{v\text{P}}\ \ldots\ \mathbf{T}_{[3]}\ \ldots\ ]]]]$

Ojibwe

In Passamaquoddy, Voice moves both recipient and theme to Spec,VoiceP, allowing C to agree with all three arguments. In Ojibwe, Voice only moves the recipient to Spec,VoiceP, causing C to only agree with donor and recipient, but not the theme.

In Wampanoag, there are four possible derivations for this particular scenario, depending on which arguments are specific. I illustrate this in (546–549), with [3] indicating a nonspecific third person argument:

(546) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{R}_{[3,+\text{SP}]}\ \mathbf{T}_{[3,+\text{SP}]}\ \mathbf{Voice}_{[\text{INT:SP}^{\text{M}},\text{SAT:–}]}\ [_{\text{ApplP}}\ t\ \text{Appl}\ [_{v\text{P}}\ \ldots\ t\ \ldots\ ]]]]$

Wampanoag 3⟶3⟶3

(547) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{T}_{[3,+\text{SP}]}\ \mathbf{Voice}_{[\text{INT:SP}^{\text{M}},\text{SAT:–}]}\ [_{\text{ApplP}}\ \mathbf{R}_{[3,-\text{SP}]}\ \text{Appl}\ [_{v\text{P}}\ \ldots\ t\ \ldots\ ]]]]$

Wampanoag 3⟶[3]⟶3

(548) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{R}_{[3,+\text{SP}]}\ \mathbf{Voice}_{[\text{INT:SP}^{\text{M}},\text{SAT:D}]}\ [_{\text{ApplP}}\ t\ \text{Appl}\ [_{v\text{P}}\ \ldots\ \mathbf{T}_{[3,-\text{SP}]}\ \ldots\ ]]]]$

Wampanoag 3⟶3⟶[3]

(549) $[_{\text{CP}}\ \mathbf{C}_{[\text{INT:3,SAT:–}]}\ \ldots\ [_{\text{VoiceP}}\ \mathbf{D}_{[3]}\ \mathbf{Voice}_{[\text{INT:SP}^{\text{M}},\text{SAT:D}]}\ [_{\text{ApplP}}\ \mathbf{R}_{[3,-\text{SP}]}\ \text{Appl}\ [_{v\text{P}}\ \ldots\ \mathbf{T}_{[3,-\text{SP}]}\ \ldots\ ]]]]$

Wampanoag 3⟶[3]⟶[3]

In (546), both recipient and theme are specific, allowing them both to shift and resulting in C agreeing with all three arguments, just like in Passamaquoddy. This corresponds to the examples in (510) discussed earlier. In (547), only the theme is specific, and thus only the theme shifts—C here only agrees with the donor and the theme, and cannot see the recipient. This corresponds to example (509) discussed earlier. In (548), only the recipient is specific, and we end up with an Ojibwe-like derivation, corresponding to our earlier examples in (512). Finally, in (549), none of the objects are specific, and so none shift. All that's left for C to agree with is the donor, just like in Blackfoot—see the earlier examples in (514).

In this way, variation in which arguments shift out of the VP can correctly capture the variation we find among the three categories of Lowest languages, all which keeping the syntactic and morphological behavior of C identical throughout. The resulting picture is one where the variation in peripheral agreemnt boils down to variation in the specification of two heads: C and Voice. The difference between the Highest and Lowest languages is due to variation in the specification of C: whether it Agrees only with the most local third person or insatiably with all accessible third persons. The difference between Lowest languages is due to variation in the specification of Voice: whether it moves all DPs it finds, only the highest DP, or only specific DPs. The variation between the Lowest languages is thus quite parallel to similar variation in object shift found across Germanic (Holmberg 1986, Diesing 1992, 1996, Thráinsson 2001, a.m.o.) and Inuit (Woolford 2017, Yuan 2022), meaning that what looks like quite an Algonquian-specific kind of phenomenon actually can be boiled down to the same basic building blocks that as those found in other unrelated language families.

10.5 Beyond Algonquian

We've seen how Expone Outermost can be leveraged to account for the Lowest peripheral agreement pattern in Algonquian, as well as how we can capture variation between Lowest languages under this framework. However, the introduction of this new mechanism for deriving anti-Minimality effects in φ agreement raises a number of crosslinguistic and typological questions. In this section, I explore three such questions:

1. **Evidence for hidden features:** This analysis derives lowest preference via multiple agreement, which results in non-outermost feature bundles being unexponed. Can we find any evidence in any language for the existence of these "hidden" features?

2. **Similar highest-lowest variation in other languages:** In Algonquian, we found highest-lowest variation with third person probes (Blackfoot versus Passamaquoddy, Ojibwe, and Wampanoag). Do we get similar highest-lowest variation in other languages, with different, perhaps less controversial probe specifications?

3. **Ergative agreement and accusative case:** It has been proposed that there are no languages with ergative patterning of agreement and accusative patterning of case marking (Dixon 1994, Bobaljik 2008). However, the Expone Outermost account of lowest preference predicts the existence of such patterns—is this a good prediction?

I argue that the answer to each of these questions is yes. I argue that a particular kind of antiagreement effect found in Karitiâna (Tupian) as well as PCC effects in Tlaxcala Nahuatl (Uto-Aztecan) provide evidence for the existence of the "hidden" features predicted by Expone Outermost, that we find highest-lowest variation in [PART] probes across varieties of Dargwa (Nakh-Daghestanian), and that, while very rare, there are languages with ergative agreement and accusative case, like Marwari (Indo-Aryan).

10.5.1 Evidence for hidden features

The morphological proposal I have made involves overagreement: the lowest-preferring probe has agreed with and copied features from all other possible goals on its way down. One might wonder if there's any evidence for this: is there a way to somehow find those other features "hiding" on the probe? Here, I discuss three such possible diagnostics of hidden features: two I am aware of examples for, Impoverishment and Person-Case Constraint (PCC) effects, and one that is as of yet purely hypothetical, allomorphy.

Impoverishment

One way to possibly "reveal" those features would be to Impoverish the outermost features, allowing for inner features to be able to be exponed. Does this ever happen? I know of one case that has this flavor: antiagreement in Karitiâna (Tupian).[22] The Karitiâna verb has a single agreement slot that, in the general case, indexes the person of the lowest argument, and is likely very high in the clause, as it sits outside illocutionary mood and polarity focus markers:

(550) Intransitives: agree with subject

a. **Y**-ta-opiso-t yn.
1SG-DECL-listen-NFUT 1SG
'I listened.'

b. **A**-ta-opiso-t an.
2SG-DECL-listen-NFUT 2SG
'You listened.'

c. **Ø**-Naka-hỹrỹja-t i.
3-DECL-sing-NFUT 3SG
'He sang.'
Karitiâna (Storto 1999:157)

(551) Transitives: agree with object

a. An **y**-ta-koy-j yn.
2SG 1SG-DECL-hurt-IRR 1SG
'You will hurt me.'

b. Yn **a**-ta-koy-j an.
1SG 2SG-DECL-hurt-IRR 2SG
'I will hurt you.'

c. Yjxa **Ø**-na-ahee-t iso.
1PL 3-DECL-blow-NFUT fire
'We blew out the fire.'
Karitiâna (Storto 1999:157)

So far, this looks exactly like Passamaquoddy and Ojibwe, except not relativized to any specific phi features in particular. Thus, we can analyze the probe here as an insatiable φ probe, [INT:φ,SAT:−], along with the rule of Expone Outermost.

However, interesting things happen to this agreement pattern when focusing/Ā extracting the object. When extracting a transitive object, the object focus marker *ti-* appears on the verb, and the verb exceptionally indexes the *transitive subject*:

(552) 'Ep **aj**-ti-pasagngã-t ajxa.
trees **2PL**-OBJ.FOC-count-NFUT 2PL
'Y'all are counting TREES.' Karitiâna (Storto 1999:163)

This is a kind of antiagreement effect, where agreement gets disrupted by Ā movement/Ā features. The interesting thing about Karitiâna is that instead of agreement simply disappearing, we get *agreement displacement*: we agree with the subject, instead of the object.

Baier (2018) argues for a morphological, Impoverishment-based analysis of antiagreement: antiagreement happens when a probe copies over both φ and Ā features, and there's an Impoverishment rule that deletes (certain) φ features in the context of Ā features. Baier's account of antiagreement, combined with Expone Outermost, can derive the Karitiâna pattern in a very elegant way: we copy both subject and object features, Impoverish the object's features if they co-occur with an Ā feature, and then the only features left to realize are the inner subject features. Thus, it is exactly in the context of object Ā extraction that we're able to reveal the "hidden" features on the probe.

[22] The exact same behavior is found in other Tupian languages, like Tuparí and Wayoró (Singerman 2018, Galucio and Nogueira 2018).

PCC effects

Person-Case Constraint (PCC) effects are constraints on the co-occurrence possibilities of different φ feature values of arguments in a particular syntactic construction, most typically constraints on the possible person values of the two objects of a ditransitive. For instance, in Spanish (Romance), the indirect object can be an SAP and the direct object a third person, but not vice-versa:

(553) Spanish ditransitives: ✓1⟶3, *3⟶1

a. **Me** **lo** ha-n recomendado.
1SG.DAT 3SG.M.ACC have-3PL recommended
'They have recommended **him to me**.' Spanish

b. *{ **Me** **le** / **le** **me** } ha-n recomendado.
1SG.ACC 3SG.DAT 3SG.DAT 1SG.ACC have-3PL recommended
Intended: 'They have recommended **me to him/her**.' Spanish

It's possible to express these meanings, but you need to use an alternative ditransitive stategy: not cliticizing/clitic-doubling the dative, but expressing it instead as an overt PP:

(554) **Me** ha-n recomendado **a** **él**.
1SG.ACC have-3PL recomended **to** **3SG.M**
'They have recommended him to me.' Spanish

This is probably a different kind of construction: as Demonte (1995), Cuervo (2003), and Sheehan (2020) argue, Spanish ditransitives in which the dative is clitic-doubled (553) are true double-object ditransitives with an applicative phrase, whereas those without clitic-doubling (as in 554) are prepositional datives, with the *a* phrase being a PP rather than a dative case-marked DP.

Space precludes me from discussing the PCC, the different varieties it comes in, or the various analyses it has received in any detail. For our purposes, it suffices to note that the recent literature has coalesced on understanding the PCC to arise from particular issues resulting from a single head agreeing with multiple goals (e.g. Albizu 1997, Ormazabal and Romero 1998, Anagnostopoulou 2003, 2005, Béjar and Rezac 2003, Nevins 2007, Rezac 2008, Walkow 2012, 2013, Preminger 2019b, Coon and Keine 2021, Deal 2022, a.m.o.). Thus, for instance, the ungrammaticality of the Spanish example in (553b) comes from some kind of problem with either Voice, *v*, or Appl (depending on the details of the analysis) trying to agree with both a third person indirect object and an SAP direct object. The PCC, then, arises due to multiple agreement.

The relevance of the PCC to our current questions is this: if PCC effects are due to multiple agreement, then PCC effects can be used to diagnose multiple agreement even when those multiple Agree relationships are not visible on the surface. Deal (2022: §3.3) notes exactly this, and discusses the case of Tlaxcala Nahuatl (Uto-Aztecan). Tlaxcala Nahuatl is a PRIMARY OBJECT (or SECUNDATIVE) language with regards to object agreement—that is, there is a single object marker on the verb, and it agrees with both monotransitive objects and ditransitive recipients:

(555) Tlaxcala Nahuatl is a primary object language

a. ni-**kim**-pia trese no-kni-wan. *agree with monotransitive object*
1SG.SBJ-**3PL.OBJ**-have thirteen 1SG-sibling-PL
'I have thirteen siblings.' Tlaxcala Nahuatl (Flores Nájera 2019: 541)

b. ni-**kin**-maka tlaxkal in no-kone-wan. *agree with indirect object*
1SG.SBJ-**3PL.OBJ**-give tortilla DEF 1SG-kid-PL
'I give tortilla to my children.' Tlaxcala Nahuatl (Flores Nájera 2019: 76)

As we can see, the same prefix *kin-* '3PL.OBJ' marks both third plural monotransitive object as well as third plural indirect objects. Themes of ditransitives are not indexed.

Thus, it may seem like the probe that gives us these object prefixes only ever agrees with one object—the highest one. However, Tlaxcala Nahuatl displays a Strong PCC effect—namely, the direct object of a ditransitive must be third person, and cannot be an SAP (Deal 2022):

(556) Tlaxcala Nahuatl PCC: ✓1⟶3, *1⟶2

a. in obispo kema o-Ø-**tech**-wal-titlani-li-h ihkón ye **se padre**.
DEF bishop yes PST-3SBJ-**1PL.OBJ**-CIS-send-APPL-PFV SO FOC **NDEF priest**
'The bishop did send **us a priest**.' Tlaxcala Nahuatl (Flores Nájera 2019: 38)

b. *o-Ø-**tech**-wal-titlani-li-h {**teh**, ***pro***$_{2SG}$}.
PST-3SBJ-**1PL.OBJ**-CIS-send-APPL-PFV **2SG** 2SG
Intended: 'He sent **you to us**.' Tlaxcala Nahuatl (Flores Nájera p.c. in Deal 2022: 21)

In (556a), we see that it's fine to have a first person indirect object and third person object. However, if we try to make that object second person, as in (556b), the result is bad, no matter whether the second person object is an overt pronoun or null *pro*. Deal proposes that in Tlaxcala Nahuatl ditransitives, the verb actually agrees with *both* objects, but only ever spells out agreement with the higher object. For Deal, the relevant probe is in Appl, which first probes the direct object before reprojecting and probing the indirect object via Cyclic Agree. Thus, object agreement in Tlaxcala Nahuatl ditransitives would be an example of Expone Outermost, as we're always exponing the last features that Appl has acquired—the indirect object's features. In this way, even though the direct object's features are never visible on the verb, we can discover that they are actually there underlyingly due to the PCC effects they help create.

Allomorphy

Finally, these hidden features also make predictions about allomorphy. For instance, if we have a head that's collected two feature bundles and only the outermost feature bundle is exponed, we might expect to be able to have the hidden, innermost feature bundle to be able to trigger allomorphy on adjacent heads. I am not aware of any concrete examples of this in natural language, so let's examine a constructed example to get a feel for what this would look like.

Suppose that C agrees with all DPs in its domain, and only expones the outermost feature bundle. Additionally, suppose that past tense T shows allomorphy depending on whether there are first person features on C. To illustrate, let's have the following toy vocabulary items:

(557) Some exponents of C

  a. C[AUTH,PART,SG] ↔ *-a* (1SG)

  b. C[ADDR,PART,SG] ↔ *-pe* (2SG)

  c. C[3,SG] ↔ *-e* (3SG)

(558) Allomorphy of past tense

  a. T[PST] ↔ *-ka* / __C[AUTH]

  b. T[PST] ↔ *-in* / __C[AUTH]

(559) Some verbs

  a. Intransitive: *dinte* 'sing'

  b. Transitive: *maha* 'hug'

And lets assume that C agrees with all DPs in the clause. A partial past intransitive paradigm for *dinte* 'sing' would thus go as follows:

(560) a. dinte -ka -a
  sing -PST.1 -1SG
  'I sang'

  b. dinte -in -pe
  sing -PST -2SG
  'you sang'

  c. dinte -in -e
  sing -PST -3SG
  'she sang'

Here, we can see the basic pattern: we get the allomorph *-ka* when the subject is first person, and *-in* elsewhere.

I provide a partial transitive paradigm of *maha* 'hug' in Table 10.4.

A↓O→	1SG	2SG	3SG
1SG	—	*maha -ka -pe* hug -PST.1 -2SG 'I hugged you'	*maha -ka -e* hug -PST.1 -3SG 'I hugged her'
2SG	*maha -ka -a* hug -PST.1 -1SG 'You hugged me'	—	*maha -in -e* hug -PST -3SG 'You hugged her'
3SG	*maha -ka -a* hug -PST.1 -1SG 'She hugged me'	*maha -in -pe* hug -PST -2SG 'She hugged you'	*maha -in -e* hug -PST -3SG 'She hugged her'

Table 10.4: Partial transitive past paradigm for *maha* 'hug'

Here, we can see that C shows lowest preference, always agreeing with the object. By fiat, we're deriving this by multiple agreement plus Expone Outermost. Additionally, whenever C has copied over first person features, that triggers the first person *-ka* allomorph of past tense.

The problem here is that these same paradigms can just as easily be derived with two φ probes, one on C and one on T. C agrees with the lowest argument, however you want to derive that, and T agrees omnivorously with first person—this would result in exactly the same data. Indeed, it's quite difficult to empirical tease apart these two options, and for this reason I am not aware of any convincing examples of allomorphy triggered by hidden features.

However, there *are* ways of telling these two derivations apart. For instance, allomorphy is often local—thus, if there were a morpheme intervening between T and C, the allomorphy account might predict that we should lose the allomorphy *-ka*. So, for instance, if there's a high negative morpheme *-ah* that appears between T and C, we might expect the following:

A↓O→	1SG	2SG	3SG
1SG	—	*maha -in -ah -pe* hug -PST -NEG -2SG 'I didn't hug you'	*maha -in -ah -e* hug -PST -NEG -3SG 'I didn't hug her'
2SG	*maha -in -ah -a* hug -PST -NEG -1SG 'You didn't hug me'	—	*maha -in -ah -e* hug -PST -NEG -3SG 'You didn't hug her'
3SG	*maha -in -ah -a* hug -PST -NEG -1SG 'She didn't hug me'	*maha -in -ah -pe* hug -PST -NEG -2SG 'She didn't hug you'	*maha -in -ah -e* hug -PST -NEG -3SG 'She didn't hug her'

Table 10.5: Partial transitive negative past paradigm for *maha* 'hug'

Here, *-ah* 'NEG' intervenes between T and C, bleeding allomorphy, and we now can only get the default past tense marker *-in* 'PST'. Now, none of these forms mark the φ features of the subject. This kind of behavior is not predicted by the two probe account, but it falls naturally out of the allomorphy account. I leave it to future research to verify whether there are any instances of allomorphy triggered by hidden features along these lines.

In summary, there are at least two attested kinds of linguistic phenomena that suggest that the inner features that are hidden by Expone Outermost really are there: antiagreement effects in Karitiâna, where Impoverishing the outermost features due to Ā movement allows inner features to be reveals, and PCC effects in languages like Tlaxcala Nahuatl, where an object agreement probe that only ever overtly expones agreement with one object nevertheless engenders PCC effects in ditransitives, indicating that it actually agrees with *both* objects of a ditransitive. Finally, I discussed the possibility of hidden features triggered allomorphy of adjacent heads, leaving it as a challenge for future work to discover cases of this sort.

10.5.2 Variation in SAP preference

As we've seen in Algonquian, there is a split between those languages in which C agrees with the highest third person, and those in which C agrees with the lowest accessible third person (with different Lowest languages differing in terms of which arguments are accessible to C). One immediate typological question we can ask is whether similar such variation can be found with cognate probes in other language families. The answer to this question is yes. We can find the exact same kind of variation across varieties of Dargwa (Nakh-Dagestanian), where cognate person-number agreement suffixes that are relativized to [PART] arguments show variation between languages that index the highest [PART] argument and those that index the lowest [PART] argument (see Sumbatova 2011 for discussion). This is completely parallel to the Algonquian situation with third person. Here, I follow Ganenkov (2022) in putting this agreement marker in T, c-commanding all verbal arguments.

In configurations with only one [PART] argument, this person suffix agrees omnivorously with that SAP argument. To illustrate the omnivorous agreement pattern, I provide examples from Chirag Dargwa (561) and Aqusha Dargwa (562) below:

(561) Omnivorous [PART] agreement in Chirag

a.

aˤ-cːe	pat'imat	gap-r-arq'-ib-**de**.
2SG-ERG	Patimat	prase-F.SG-PFV-AOR-**2SG**

'You praised Patimat.'

b.

pat'imat-le	uˤ	gap-w-arq'-ib-**de**
Patimat-ERG	2SG.ABS	praise-M.SG-PFV-AOR-**2SG**

'Patimat praised you.' Chirag Dargwa (Ganenkov 2022: 753)

(562) Omnivorous [PART] agreement in Aqusha

a.

ħu-ni	il-di	b-ax-un-**ri**.
2SG-ERG	3-PL	F.PL-feed-AOR-**2SG**

'You fed them.'

b.

il-da-ni	ħu	r-ax-un-**ri**.
3-PL-ERG	2SG	F.SG-feed-AOR-**2SG**

'They fed you.' Aqusha Dargwa (van den Berg 1999: 164)

In the (a) examples, we have a second person subject and a third person object, and the bolded person suffix indexes the subject. In the (b) examples, we have a third person subject and a second person object, and the person suffix indexes the object. In each case, T seeks out [PART] arguments in preference to third persons.

However, there is variation in SAP⟶SAP configurations. One kind of variation we see is between Highest and Lowest languages, with Highest languages agreeing with the higher SAP, and Lowest languages agreeing with the lower SAP. Interestingly, only Chirag is in the Highest camp, while the Lowest camp is populated by Ashti, Aqusha, Gapshimi, Tanti, and Urakhi (Sumbatova 2011, Belyaev 2013, Sumbatova and Lander 2014: Ch.6).[23] Here I illustrate, again, with Chirag and Aqusha:

[23]There is more variation than this. In another group of languages (Icari, Kaytag, Khuduts, and Qunqi), T agrees with the highest argument on the hierarchy 2>1(>3). In Sanzhi, T can agree with either argument in SAP>SAP configurations (Forker 2020). Finally, Mehweb has developed an egophoric agreement system (on egophoricity, see San Roque et al. 2018 and Coppock and Wechsler 2018, a.m.o.).

(563) Highest in Chirag

a. di-cːe uˁ gap-w-arq'-ib-**da**.
1SG-ERG 2SG.ABS praise-M.SG-PFV-AOR-**1**
'I praised you.'

b. aˁ-cːe du gap-w-arq'-ib-**de**.
2SG-ERG 1SG.ABS praise-M.SG-PFV-AOR-**2SG**
'You praised me.' Chirag Dargwa (Ganenkov 2022: 752-753)

(564) Lowest in Aqusha

a. nu-ni ħu r-it-i-**ri**.
1SG-ERG 2SG F.SG-hit-AOR-**2SG**
'I hit you.'

b. ħu-ni nu r-it-i-**ra**.
2SG-ERG 1SG F.SG-hit-AOR-**1**
'You hit me.' Aqusha Dargwa (van den Berg 1999: 158)

As we can see, Chirag behaves like Blackfoot, preferring the higher argument, and Aqusha behaves like Passamaquoddy, Ojibwe, and Wampanoag, preferring the lower argument. This variation is exactly parallel to the variation we find in Algonquian, except with a different probe specification: whereas in Algonquian C is relativized to third person, here we find relativization to [PART]. We can thus say that Chirag T is specified [INT:PART,SAT:PART], and Aqusha T is specified [INT:PART,SAT:–] with Expone Outermost.

10.5.3 A problematic typological prediction?

The final point of discussion is a potentially problematic typological prediction that my proposal makes. Namely, if we have a high probe specified [INT:φ,SAT:–], like in Karitiâna, along with morphological nominative-accusative case marking, then that would result in an ergative-aligned agreement system (agreeing with the subject of an intransitive, object of a transitive) in a language with accusative-aligned case. This is usually taken to be a typological gap (Dixon 1994, Bobaljik 2008), with important consequences for the theory of agreement and how it interacts with case (Bobaljik 2008; see also Bárány 2021).

However, while this seems to be overwhelmingly statistically true (and my proposal says nothing about why that might be so), I think there is at least (one construction in) one language that fills in this particular proposed gap: perfective clauses in Marwari (Indo-Aryan). Marwari has lost the classic Indo-Aryan ergative case marking system found in perfectives, regularizing everything to nominative-accusative case, but it still preserves the ergative agreement pattern in perfectives:

(565) a. mhaiṃ śaraṇ=naiṃ dekh-**ī**
1SG Sharan(F)=ACC see-**PST.F.SG**
'I saw Sharan.'

b. mammī <u>ma=naiṃ</u> god-meṃ uṭhā-li-**yo**
Mama(F) <u>1SG=ACC</u> lap=LOC heave-take-**PST.M.SG**
'Mama took <u>me</u> up in her lap.' Marwari (Verbeke 2013: 215)

In these examples, the verb agrees with the transitive object, which is marked with the accusative marker *=naiṃ*, counter to what is typically expected.

The case of Marwari isn't unknown in the literature, and people have tried to explain it away. Bobaljik (2017) suggests that this case isn't a real counterexample because *=naiṃ* 'ACC' is sensitive to specificity (like accusative marking in many Indo-Aryan languages, and many other languages across the world), and proposes that *=naiṃ* isn't actually an accusative case marker but rather just a specificity marker. It's unclear to me how tenable this proposal is: *=naiṃ* always appears with indirect objects, and it's optional with specific inanimates but obligatory with specific animates. This kind of interaction between animacy and specificity, as well as the use of dative markers as differential object markers, are all characteristic of differential case marking but not of quantifiers. The simple fact is that *=naiṃ* shows the same kind of behavior we find with many other languages' accusative case, so why is *=naiṃ* suddenly not a "real" accusative case marker?

Grosz and Patel-Grosz (2014) also argue that this isn't a real counterexample, and they propose to analyze the Marwari agreement behavior along the lines of Romance participle agreement—you agree with both subject *and* object, subject in T and object in *v*—which is revealed by auxiliary verb constructions:

(566) <u>mhāī</u> **sītā=ne** dekh-**ī** <u>hū</u>
<u>1SG</u> **Sita(F)=ACC** see-**PST.F.SG** <u>be.1SG</u>
'<u>I</u> have seen **Sita**.' Jodhpur Marwari (Magier 1983:250)

In the Jodhpur Marwari example above, the lexical verb agrees with the object, but the auxiliary verb agrees with the subject. Grosz and Patel-Grosz (2014) then propose that this is exactly what happens in the simple tenses without auxiliaries, but there T remains unpronounced.[24] However, Verbeke (2013) notes that this agreement pattern is innovative, and not found in all dialects of Marwari. Thus, Grosz and Patel-Grosz's (2014) proposal is not enough to explain away the case of Marwari, as the data they account for only represents a subset of varieties of Marwari.

From the point of view of Expone Outermost, it's actually entirely expected that there should be a language with ergative agreement and accusative case marking, and the case of Marwari is thus a welcome cell in the typology. There is no reason to try and explain it away. Thus, what might have seemed like a problematic prediction actually turns into a welcome one.

10.6 Conclusion

In this chapter, I've presented the variation we find in peripheral agreement through Algonquian in scenarios with more than one third person, and discussed the patterns we see through the lens of the theory of agreement and the principle of Minimality. I showed that three of the languages

[24]It is worth noting at this point the similarity between their proposal and mine—the only difference is that subject and object agreement for Grosz and Patel-Grosz (2014) come from different probes, but for me they would be on one single multiply-valued probe. In both cases the features from the higher argument go unpronounced.

in our sample, Passamaquoddy, Ojibwe, and Wampanoag, all show anti-Miminality effects in φ agreement, with peripheral agreement preferring to index *lower* third person arguments: lowest preference. The data from Algonquian is particularly problematic for existing off-the-shelf analyses of lowest-preference, like case-discrimination, a low probe, and syntactic inversion, as they each face crucial empirical problems: an inability to account for the omnivority of peripheral agreement, placing the probe too low, or making incorrect predictions about when internal arguments move over external arguments. Instead, I borrowed from the literature on multiple case assignment to propose a novel morphological pathway to lowest preference (though not one completely without precedent: see Bruening 2001b: 234 and Bruening and Rackowski 2001: 77 for a brief suggestion along these lines): multiple agreement followed by Expone Outermost. The proposal, in brief, is that the Lowest languages have an insatiable third person probe in C, [INT:3,SAT:−], which only expones the outermost feature bundle, and variation across the Lowest languages is captured by varying which arguments are able to escape the VP phase: all arguments in Passamaquoddy, only the highest object in Ojibwe, and only specific arguments in Wampanoag. Finally, I discussed the typological and theoretical ramifications of this proposal, arguing that there are several positive outcomes: we can find evidence for "hidden", unexponed features, we can nicely account for similar cross-family variation in languages like the various varieties of Dargwa, and we can even account for the typological unusual agreement pattern in Marwari perfectives, which combine ergative agreement with accusative case marking.

It's worth noting the crucially *morphological* nature of the proposal. Expone Outermost is a morphological microparameter regulating what happens when spelling out multiply-valued heads—it doesn't modify any underlying syntactic operations. Expone Outermost makes predictions about how insatiable agreement can be realized morphologically, but it doesn't change how the actual syntax of Agree works. This is important, because while Expone Outermost can generate instances of lowest-preference in φ agreement, it cannot generate instances of lowest-preference in *movement*, even if we believe movement is triggered by Agree, as movement is fundamentally a narrow-syntactic phenomenon. This is likely a welcome outcome, as discussed in Section (10.1), as there do no seem to be any instances of lowest-preference in movement: for instance, hypothetical "anti-superiority" effects, where a language prefers moving the lowest *wh* item in a multiple *wh* question.

Finally, the existence of morphological spellout rules like Expone Outermost has various ramifications for us as linguists. For instance, we are pushed to reassess other cases of lowest-preference in the literature that have been given syntactic analyses, like Georgian (Béjar 2003, Béjar and Rezac 2009), Erzya Mordvin (Béjar 2003, Béjar and Rezac 2009, Colley 2018), Quechua (Myler 2017), and others. Could Expone Outermost be the right analysis for them too? Another consequence of Expone Outermost is that it forces us to really reckon with the fact that morphology of agreement doesn't always transparently betray the syntax of agreement. As we've seen, with Expone Outermost, an agreement marker indexing features from a single argument might actually be the exponent of an insatiable or multiply-valued probe, despite surface appearances. Further work thus remains to be done to figure out the full landscape of how multiply-valued heads are exponed, and what the range of transparent and nontransparent spellout possibilities are. Are there other outcomes besides Expone Outermost? What about something like Expone Innermost? How would we be able to tell that apart from simple agreement with the most local goal? Can featural markedness regulate exponence, resulting in something like "Expone Most Marked"? Interesting questions abound, and I hope they will be tackled in future work.

Chapter 11

Conclusion

In Part II, I've presented an analysis of the similarities and differences in peripheral agreement across Algonquian and outlined its consequences for the theory of φ agreement. Chapter 9 discussed the third person preference of peripheral agreement, universal across Algonquian, and showed that it forces us to abandon 3noP, the idea that third person is featurally underspecified relative to first and second person—peripheral agreement must be analyzed as a probe specified for third person, e.g. [INT:3] (among other options). I argued that there is no tenable alternative to this: we cannot reanalyze this pattern as probing for animacy, obviation, [D], or resulting from the Activity Condition or movement of third person arguments.

In Chapter 10, I explored the variation we find across Algonquian, identifying four broad classes of languages:

- **Blackfoot-type languages**, where peripheral agreement indexes the highest third person;
- **Passamaquoddy-type languages**, where peripheral agreement indexes the lowest third person;
- **Ojibwe-type languages**, where peripheral agreement indexes the lowest third person—except themes of ditransitives are inaccessible for agreement;
- **Wampanoag-type languages**, where peripheral agreement indexes the lowest definite/specific third person (and if there is none, it agrees with the highest argument, if third person).

While Blackfoot-type languages are straightforward to analyze (once we abandon 3noP)—the peripheral agreement probe can be specified [INT:3,SAT:3]—the other three types are problematic for the idea that Agree is subject to Minimality: why don't higher third persons count as interveners for peripheral agreement? Where does the lowest preference come from? After showing that the precise details of Algonquian lowest-preference are problematic for existing accounts of lowest preference in φ agreement in other languages (such as case-discriminating probes, a low probe, and syntactic inversion), I offered a new, morphological account of lowest preference: C agrees with *all* matching accessible goal, but then only spells out the last, outermost feature bundle it has acquired: Expone Outermost. This approach correctly captures the properties of Algonquian lowest preference, and allows for a simple account of the contrast between Blackfoot-type languages and the others: we simply vary whether the probe Agrees only once (with the highest goal) or insatiably (with all goals). In order to account for variation between Passamaquoddy, Ojibwe, and Wampanoag-type languages, I proposed that they vary in terms of which arguments shift out of the P phase, paralelling similar variation in object shift in Germanic (Holmberg 1986, Thráinsson 2001, a.m.o.) and variation in ergative patterning in Inuit (Woolford 2017, Yuan 2022): everything shifts in Passamaquoddy, only the highest object shifts in Ojibwe, and only definite/ specific DPs shift in Wampanoag. I also discussed the typological consequences of my proposal, arguing that the novel predictions I make are largely borne out.

To conclude, I present a few loose ends. One thread to purse is to further explore the consequences of abandoning 3yesP: there exist several proposals for various agreement phenomena that assume that third person is underspecified. How should we rethink them? In many cases, I suspect the answer is simple—we can reformulate sensitivity to [π] (person) as sensitivity to [PART]—but other cases are not so simple (e.g. predicting the typology of PCC effects). Additionally, the consequences of Expone Outermost should be explored further as well—a natural next question to ask is whether there are different kinds of outcomes of multiple valuation besides Expone Outermost and simply exponing every feature. For instance, is there Expone Innermost? Expone Most Marked? Another loose thread is that I don't provide independent evidence for the various kinds of object shift I propose for the different Lowest languages: Passamquoddy, Ojibwe, and Wampanoag should be investigated further to see if various predictions of this proposal can be verified. Finally, there's one (conditional) universal about Algonquian peripheral agreement that remains unexplained: all Blackfoot-type languages, as far as I'm aware, ban agreement with ditransitive themes, just like Ojibwe. However, this doesn't follow from my analysis: I predict that it should be possible for a language to have their peripheral agreement probe specified [INT:3,SAT:3] and for all arguments to shift out of the VP phase, which should result in a Blackfoot-type language that agrees with the ditransitive theme if and only if we have an SAP→SAP→3 scenario. This kind of languages is conspicuously absent. Why?

Bibliography

Ackema, Peter, and Ad Neeleman. 2013. Person features and syncretism. *Natural Language & Linguistic Theory* 31:901–950.

Ackema, Peter, and Ad Neeleman. 2018. *Features of Person: From the Inventory of Persons to Their Morphological Realization*. Number 78 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.

Ackema, Peter, and Ad Neeleman. 2019. Default person versus default number in agreement. In *Agreement, case and locality in the nominal and verbal domains*, ed. Ludovico Franco, Mihaela Marchis Moreno, and Matthew Reeve, 21–54. Berlin: Language Science Press.

Adams, Nikki B. 2010. The Zulu ditransitive verb phrase. Doctoral Dissertation, University of Chicago, Chicago.

Aikhenvald, Alexandra Y. 2010. *Imperatives and Commands*. Oxford: Oxford University Press.

Aissen, Judith. 1997. On the syntax of obviation. *Language* 73:705–750.

Alarcos Llorach, Emilio. 1994. *Gramática de la lengua española [Grammar of the Spanish language]*. Madrid: Espasa Calpe.

Albizu, Pablo. 1997. Generalized person-case constraint: A case for a syntax-driven inflectional mor- phology. In *Theoretical Issues at the Morphology-Syntax Interface*, ed. Myriam Uribe-Etxebarria and Amaya Mendikoetxea, number 40 in Supplements of the *Anuario del Seminario de Filología Vasca «Julio de Urquijo»*, International Journal of Basque Linguistics and Philology, 1–33. Bilbao: UPV-EHU.

Alboiu, Gabriela, and Virginia Hill. 2016. Evidentiality and Raising to Object as A'-Movement: A Romanian Case Study. *Syntax* 19:256–285.

Alcaraz, Alejo. 2018. The spurious vs. dative problem. In *Selected papers from 'Going Romance' 20, Nijmegen*, ed. Janine Berns, Haike Jacobs, and Dominique Nouveau, number 13 in Romance Languages and Linguistic Theory, 5–20. Amsterdam: John Benjamins.

van Alem, Astrid. 2023. Life of Phi: Phi-features in West Germanic and the syntax-morphology interface. Doctoral Dissertation, Leiden University.

Alsina, Àlex, and Eugenio M. Vigo. 2017. Fixing LFG to account for direct-inverse alignment: The case of Plains Cree. In *Proceedings of the LFG '17 Conference*, ed. Miriam Butt and Tracy Holloway King, 22–44. Stanford: CSLI.

Altshuler, Daniel, and Robert Truswell. 2022. *Coordination and the Syntax–Discourse Interface*. Number 12 in Oxford Surveys in Syntax and Morphology. Oxford: Oxford University Press.

Anagnostopoulou, Elena. 2003. *The Syntax of Ditransitives: Evidence from clitics*. Berlin: Mouton de Gruyter.

Anagnostopoulou, Elena. 2005. Strong and weak person restrictions: A feature checking analysis. In *Clitic and Affix Combinations: Theoretical perspectives*, ed. Lorie Heggie and Francisco

Ordóñez, number 74 in Linguistik Aktuell, 199–235. Amsterdam: John Benjamins.

Anand, Pranav, and Valentine Hacquard. 2013. Epistemics and attitudes. *Semantics and Pragmatics* 6:1–59.

Angelopoulos, Nikolaos. 2015. Explorations of (Greek) Pseudo-relatives. Master's thesis, UCLA.

Aravind, Athulya. 2017. Ā-Interactions and Feature-Geometries. In *A Pesky Set: Papers for David Pesetsky*, ed. Claire Halpert, Hadas Kotek, and Coppe van Urk, number 80 in MIT Working Papers in Linguistics, 333–342. Cambridge, MA: MIT Working Papers in Linguistics.

Archangeli, Diana. 1984. Underspecification in Yawelmani Phonology and Morphology. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Archangeli, Diana. 1988. Aspects of Underspecification Theory. *Phonology* 5:183–207.

Armoskaite, Solveiga. 2011. The Destiny of Roots in Blackfoot and Lithuanian. Doctoral Dissertation, UBC.

Arregi, Karlos, and Emily A. Hanink. 2022a. Reverse weak PCC in Washo. In *Proceedings of NELS 52*, ed. Özge Bakay, Breanna Pratley, Eva Neu, and Peyton Deal, volume 1, 43–56. Amherst, MA: GLSA.

Arregi, Karlos, and Emily A. Hanink. 2022b. Switch reference as index agreement. *Natural Language and Linguistic Theory* 40:651–702.

Arregi, Karlos, and Andrew Nevins. 2012. *Morphotactics: Basque Auxiliaries and the Structure of Spellout*. Number 86 in Studies in Natural Language and Linguistic Theory. Dordrecht: Springer.

Ash, Anna, jessie little doe fermino, and Ken Hale. 2001. Diversity in Local Language Maintenance and Restoration: A Reason for Optimism. In *The Green Book of Language Revitalization*, ed. Leanne Hinton and Ken Hale, 19–35. Leiden and Boston: Brill.

Baclawski, Kenneth, and Peter Jenks. 2016. Clefts and anti-Superiority in Moken. *Journal of the Southeast Asian Linguistics Society* 9:81–96.

Baier, Nicholas. 2018. Anti-Agreement. Doctoral Dissertation, University of California, Berkeley.

Baker, Mark. 1985. The Mirror Principle and Morphosyntactic Explanation. *Linguistic Inquiry* 16:373–415.

Baker, Mark. 2015. *Case: Its Principles and its Parameters*. Cambridge: Cambridge University Press.

Baker, Mark, and Ruth Kramer. 2018. Doubled clitics are pronouns. *Natural Language & Linguistic Theory* 36:1035–1088.

Baker, Mark, and Nadya Vinokurova. 2010. Two modalities of case assignment: case in Sakha. *Natural Language & Linguistic Theory* 28:593–642.

Baker, Mark C., Ken Safir, and Justine Sikuku. 2012. Sources of (A)symmetry in Bantu Double Object Constructions. In *Proceedings of the 30th West Coast Conference on Formal Linguistics*, ed. Nathan Arnett and Ryan Bennett, 54–64. Somerville, MA: Cascadilla Proceedings Project.

Bakker, Peter. 2006. Algonquian Verb Structure: Plains Cree. In *What's in a verb? Studies in the verbal morphology of the languages of the Americas*, ed. Grażyna J. Rowicka and Eithne B. Carlin, number 5 in LOT Occasional Series, 3–27. Utrecht: LOT.

Bar-Lev, Zev, and Arthur Palacas. 1980. Semantic command over pragmatic priority. *Lingua* 51:137–146.

Bardagil, Bernat. 2020. Number morphology in Panará. *Linguistic Variation* 20:312–323.

Bassi, Itai, and Tatiana Bondarenko. 2021. Composing CPs: Evidence from disjunction and conjunction. In *Proceedings of SALT 30*, ed. Joseph Rhyne, Kaelyn Lamp, Nicole Dreier, and Chloe

Kwon, 583–602.
Belyaev, Oleg. 2013. Optimal Agreement at M-Structure: Person in Dargwa. In *Proceedings of the LFG'13 Conference*, ed. Miriam Butt and Tracy Holloway King, 90–110. Stanford: CSLI Publications.
van den Berg, Helma. 1999. Gender and person agreement in Akusha Dargi. *Folia Linguistica* 33:153–168.
Bhadra, Diti. 2018. Evidentials are syntax-sensitive: The view from Bangla. *Glossa* 3:1–39.
Bhatt, Rajesh, and Elena Anagnostopoulou. 1996. Object shift and specificity: Evidence from *ko*-phrases in Hindi. In *CLS 32: Papers from the Main Session*, ed. Lise Dobrin, Kora Singer, and Lisa McNair, volume 1, 11–22. Chicago: Chicago Linguistic Society.
Bhatt, Rajesh, and Stefan Keine. 2017. Long-Distance Agreement. In *The Wiley Blackwell Companion to Syntax*, ed. Martin Everaert and Henk C. van Riemsdijk. Hoboken, NJ: John Wiley & Sons, second edition.
Bickmore, Lee. 2007. *Cilungu phonology*. Stanford: CSLI Publications.
Bjorkman, Bronwyn. 2012. A syntactic correlate of a semantic asymmetry. In *Proceedings of NELS 41*, ed. Yelena Fainleib, Nicholas LaCara, and Yangsook Park, 99–112. Amherst: GLSA.
Bjorkman, Bronwyn. 2013. A Syntactic Answer to a Pragmatic Puzzle: The case of Asymmetric *and*. In *Syntax and its Limits*, ed. Raffaella Folli, Christina Sevdali, and Robert Truswell, number 48 in Oxford Studies in Theoretical Linguistics, 391–408. Oxford: Oxford University Press.
Blain, Eleanor M. 1997. Wh-constructions in Nêhiyawêwin (Plains Cree). Doctoral Dissertation, University of British Columbia.
Blain, Eleanor M., and Rose-Marie Déchaine. 2006. The Evidential Domain Hypothesis. In *Proceedings of WSCLA II*, ed. Atsushi Fujimori and Amélia Reis Silva, 12–25. Vancouver, BC: UBC Working Papers in Linguistics.
Blain, Eleanor M., and Rose-Marie Déchaine. 2007. Evidential Types: Evidence from Cree Dialects. *International Journal of American Linguistics* 73:257–291.
Blakemore, Diane, and Robyn Carston. 2005. The pragmatics of sentential coordination with *and*. *Lingua* 115:569–589.
Bliss, Heather. 2005. Topic, Focus, and Point of View in Blackfoot. In *Proceedings of the 24th West Coast Conference on Formal Linguistics*, ed. John Alderete, Chung-hye Han, and Alexei Kochetov, 61–69. Somerville, MA: Cascadilla Proceedings Project.
Bliss, Heather. 2009. Structuring Information in Blackfoot: Against an A'-Agreement Analysis of Cross-Clausal Agreement. In *Actes du congrès annuel de l'Association canadienne de linguistique 2008*, ed. Susie Jones. Canadian Linguistics Society.
Bliss, Heather. 2013. The Blackfoot configurationality conspiracy: Parallels and differences in clausal and nominal structures. Doctoral Dissertation, University of British Columbia, Vancouver, BC.
Bliss, Heather. 2017. Dependencies in Syntax and Discourse: Obviation in Blackfoot and Beyond. *Working Papers of the Linguistics Circle of the University of Victoria* 27:1–26.
Bliss, Heather, and Karen Jesney. 2005. Resolving hierarchy conflict: local obviation in Blackfoot. *Calgary Working Papers in Linguistic* 26:92–116.
Bliss, Heather, and Will Oxford. 2016. A Microparametric Approach to Syncretisms in Nominal Inflection. In *Proceedings of the 33rd West Coast Conference on Formal Linguistics*, ed. Kyeong-min Kim, Pocholo Umbal, Trevor Block, Queenie Chan, Tanie Cheng, Kelli Finney, Mara Katz,

Sophie Nickel-Thompson, and Lisa Shorten, 67–76. Somerville, MA: Cascadilla Proceedings Project.

Bliss, Heather, and Will Oxford. 2017. Patterns of Syncretism in Nominal Paradigms: A Pan-Algonquian Perspective. In *Papers of the 46th Algonquian Conference*, 1–18. East Lansing: Michigan State University Press.

Bliss, Heather, Elizabeth Ritter, and Martina Wiltschko. 2014. A comparative analysis of theme marking in Blackfoot and Nishnaabemwin. In *Papers of the 42nd Algonquian Conference*, ed. J. Randolph Valentine and Monica Macaulay, 10–33. Albany: SUNY Press.

Bloomfield, Leonard. 1934. *Plains Cree Texts*. Number 16 in Publications of the American Ethnological Society. New York: G. E. Stechert & Co.

Bloomfield, Leonard. 1946. Algonquian. In *Linguistic structures of Native America*, ed. Henry Hoijer, 85–129. New York: Viking Fund.

Bloomfield, Leonard. 1957. *Eastern Ojibwa: Grammatical Sketch, Texts, and Word Lists*. Ann Arbor: University of Michigan Press.

Bloomfield, Leonard. 1962. *The Menomini Language*. New Haven: Yale University Press.

Bobaljik, Jonathan D. 2008. Where's Phi? Agreement as a Post-Syntactic Operation. In *Phi Theory: Phi-features across interfaces and modules*, ed. Daniel Harbour, David Adger, and Susana Béjar, number 16 in Oxford Studies in Theoretical Linguistics, 295–328. Oxford: Oxford University Press.

Bobaljik, Jonathan D. 2017. In defense of a universal: A brief note on case, agreement, and differential object marking. Manuscript, University of Connecticut and Leibniz-Zentrum Allgemeine Sprachwissenschaft, University of Connecticut and Leibniz-Zentrum Allgemeine Sprachwissenschaft.

Bogal-Albritten, Elizabeth. 2016. Building meaning in Navajo. Doctoral Dissertation, University of Massachusetts Amherst, Amherst.

Bogomolets, Ksenia, Paula Fenger, and Adrian Stegovec. 2023. Movement in disguise: Morphology as a diagnostic for verb movement in Algonquian. To apear in *Syntax*.

Bondarenko, Tatiana. 2020. Feature gluttony for Algonquian: agreement in Passamaquoddy. Generals paper, MIT.

Bondarenko, Tatiana. 2022. Anatomy of an Attitude. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Bondarenko, Tatiana, and Colin Davis. 2023. Concealed pied-piping in Russian: On left-branch extraction, parasitic gaps, and the nature of discontinuous nominal phrases. *Syntax* 26:1–40.

Bondarenko, Tatiana, and Stanislao Zompì. 2021. Leftover Agreement: Spelling Out Kartvelian Number. In *Proceedings of the 38th West Coast Conference on Formal Linguistics*, ed. Rachel Soo, Una Y. Chow, and Sander Nederveen, 65–73. Somerville, MA: Cascadilla Proceedings Project.

Bonet, Eulàlia. 1995. Feature structure of Romance clitics. *Natural Language and Linguistic Theory* 13:607–647.

Bošković. 2002. On Multiple *Wh*-Fronting. *Linguistic Inquiry* 33:351–383.

Bošković, Željko. 1997. Superiority effects with multiple *wh*-fronting in Serbo-Croation. *Lingua* 102:1–20.

Bošković, Željko. 2007. A note on *wh* typology. In *Linguistic investigations into formal description of Slavic languages*, ed. Peter Kosta and Lilia Schürcks, 159–170. Frankfurt am Main: Peter Lang.

Bošković, Željko. 2013. Traces do not head islands: What can PF deletion rescue? In *Deep Insights*, *Broad perspectives: Essays in Honor of Mamoru Saito*, ed. Yoichi Miyamoto, Daiko Takahashi, Hideki Maki, Masao Ochi, Koji Sugisaki, and Asako Uchibori, 56–93. Tokyo: Kaitakusha.

Bošković, Željko. 2015. On Multiple Left-Branch Dislocation: Multiple Extraction and/or Scattered Deletion? In *Annual Workshop on Formal Approaches to Slavic Linguistics: The First Berkeley Meeting*, ed. Małgorzata Szajbel-Keck, Roslyn Burns, and Darya Kavitskaya, 20–35. Ann Arbor: Michigan Slavic Publications.

Bošković, Željko. 2020. On the Coordinate Structure Constraint, across-the-board-movement, phases, and labeling. In *Recent Developments in Phase Theory*, ed. Jeroen van Craenenbroeck, Cora Pots, and Tanja Temmerman, number 139 in Studies in Generative Grammar, 133–182. Berlin: Mouton de Gruyter.

Branan, Kenyon, and Michael Yoshitaka Erlewine. 2022. Locality and (minimal) search. To appear in the *Cambridge Handbook of Minimalism*, eds. Kleanthes K. Grohmann and Evelina Leivada.

Branigan, Phil. 2023. *The Grammar of Multiple Head-Movement: A Comparative Study*. Oxford Studies in Comparative Syntax. Oxford: Oxford University Press.

Branigan, Phil, and Julie Brittain. 2016. East Cree Relative Root Complements as Criterial Sisters. Manuscript, Memorial University.

Branigan, Phil, Julie Brittain, and Carrie Dyck. 2005. Balancing syntax and prosody in the Algonquian verb complex. In *Papers of the 36th Algonquian Conference*, ed. H. C. Wolfart, 1–19. Winnipeg: Univerisity of Manitoba.

Branigan, Phil, and Marguerite MacKenzie. 1999. Binding relations and the nature of *pro* in Innu-aimun. In *Proceedings of NELS 29*, ed. Pius Tamanji, Masako Hirotani, and Nancy Hall, volume 1, 475–485. UMass Amherst: GLSA.

Branigan, Phil, and Marguerite MacKenzie. 2001. How Much Syntax can You Fit into a Word? Late insertion and verbal agreement in Innu-aimûn. In *Proceedings of WSCLA 5*, ed. Suzanne Gessner, Sunyoung Oh, and Kayono Shiobara, 37–52. Vancouver, BC: UBC Working Papers in Linguistics.

Branigan, Phil, and Marguerite MacKenzie. 2002. Altruism, A'-movement, and object agreement in Innu-aimûn. *Linguistic Inquiry* 33:385–407.

Bresnan, Joan, and Lioba Moshi. 1990. Object Asymmetries in Comparative Bantu Syntax. *Linguistic Inquiry* 21:147–185.

Brittain, Julie. 1996. Two Negative Morphemes in Sheshâtshît Montagnais (Innu-Aimun): *apû* and *ekâ*. In *Papers of the 27th Algonquian Conference*, ed. David H. Pentland, 25–36. Winnipeg: University of Manitoba.

Brittain, Julie. 1997. The Conjunct Verb in Sheshatshit Montagnais. *Canadian Journal of Linguistics* 42:253–284.

Brittain, Julie. 1999. A reanalysis of transitive animate theme signs as object agreement: Evidence from Western Naskapi. In *Papers of the 30th Algonquian Conference*, ed. David H. Pentland, 34–46. Winnipeg: Manitoba.

Brittain, Julie. 2001. *The Morphosyntax of the Algonquian Conjunct Verb.* New York: Garland Publishing.

Brittain, Julie. 2003. A Distributed Morphology account of the syntax of the Algonquian verb. In *2003 CLA conference proceedings*, ed. Sophie Burelle and Stanca Somefalean, 25–39.

Bruening, Benjamin. 2001a. Constraints on Dependencies in Passamaquoddy. In *Actes du 32e Congrès des Algonquinistes*, ed. John D. Nichols, 35–60. Winnipeg: University of Manitoba.

Bruening, Benjamin. 2001b. Syntax at the Edge: Cross-Clausal Phenomena and the Syntax of

Passamaquoddy. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Bruening, Benjamin. 2004. Two Types of Wh-Scope Marking in Passamaquoddy. *Natural Language & Linguistic Theory* 22:229–305.

Bruening, Benjamin. 2005. The Algonquian Inverse is Syntactic: Binding in Passamaquoddy. Manuscript, University of Delaware.

Bruening, Benjamin. 2006. Differences Between the Wh-Scope-Marking and Wh-Copy Constructions in Passamaquoddy. *Linguistic Inquiry* 37:25–49.

Bruening, Benjamin. 2007. On the Word Order of Quantificational Elements in Passamaquoddy. Handout from an invited talk at UCLA.

Bruening, Benjamin. 2008. Quantification in Passamaquoddy. In *Quantification: A Cross-Linguistic Perspective*, ed. Lisa Matthewson, volume 64 of *North-Holland Linguistic Series: Linguistic Variations*, 67–103. Bingley: Emerald Goup.

Bruening, Benjamin. 2009. Algonquian Languages Have A-movement and A-Agreement. *Linguistic Inquiry* 40:427–445.

Bruening, Benjamin. 2019. The Algonquian Prefix is an Affix, Not a Clitic: Implications for Morphosyntax. Manuscript, University of Delaware.

Bruening, Benjamin, and Vivian Lin. 2001. Discontinuous QPs and LF Interference Effects in Passamaquoddy. In *Proceedings of SULA 1*, ed. Ji-Yung Kim and Adam Werle, 20–28. Amherst: GLSA.

Bruening, Benjamin, and Andrea Rackowski. 2001. Configurationality and Object Shift in Algonquian. In *Proceedings of the Workshop on the Structure and Constituency of Languages of the Americas 5*, ed. Suzanne Gessner, Sunyoung Oh, and Kayono Shiobara, volume 5, 71–84. Vancouver, BC: UBC Working Papers in Linguistics.

Bryant, Shannon, and Diti Bhadra. 2021. Situation types in complementation: Oromo attitude predication. In *Proceedings of SALT 30*, ed. Joseph Rhyne, Kaelyn Lamp, Nicole Dreier, and Chloe Kwon, 83–104.

Bárány, András. 2021. A typological gap in ditransitive constructions. In *Proceedings of the 38th West Coast Conference on Formal Linguistics*, ed. Rachel Soo, Una Y. Chow, and Sander Nederveen, 43–53. Somerville, MA: Cascadilla Proceedings Project.

Béjar, Susana. 2003. Phi-Syntax: A Theory of Agreement. Doctoral Dissertation, University of Toronto.

Béjar, Susana, and Diane Massam. 1999. Multiple Case Checking. *Syntax* 2:65–79.

Béjar, Susana, and Milan Rezac. 2003. Person Licensing and the Derivation of PCC Effects. In *Romance Linguistics: Theory and Acquisition. Selected papers from the 32nd Linguistic Symposium on Romance Languages (LSRL), Toronto, April 2002*, ed. Ana Teresa Pérez-Leroux and Yves Roberge, number 244 in Current Issues in Linguistic Theory, 49–62. Amsterdam: John Benjamins.

Béjar, Susana, and Milan Rezac. 2009. Cyclic Agree. *Linguistic Inquiry* 40:35–73.

Caha, Pavel. 2022. Case Stacking. Manuscript, Masaryk University.

Calabrese, Andrea. 1995. A constraint-based theory of phonological markedness and simplification procedures. *Linguistic Inquiry* 26:373–463.

Campana, Mark. 1996. The Conjunct Order in Algonquian. *Canadian Journal of Linguistics* 41:201–234.

Carstens, Vicki. 2003. Rethinking Complementizer Agreement: Agree with a Case-Checked Goal.

Linguistic Inquiry 34:393–412.
Carstens, Vicki. 2005. Agree and EPP in Bantu. *Natural Language and Linguistic Theory* 23:219–279.
Carstens, Vicki, and Michael Diercks. 2013. Parameterizing Case and Activity: Hyper-raising in Bantu. In *Proceedings of NELS 40*, ed. Seda Kan, Claire Moore-Cantwell, and Robert Staubs, volume 1, 99–118. Amherst, MA: GLSA.
Carston, Robyn. 1993. Conjunction, explanation and relevance. *Lingua* 90:27–48.
Carston, Robyn. 2002. *Thoughts and Utterances: The Pragmatics of Explicit Communication*. Oxford: Blackwell.
Castroviejo, Elena. 2006. *Wh*-exclamatives in Catalan. Doctoral Dissertation, University of Barcelona.
Castroviejo, Elena. 2007. A Degree-Based Account of *Wh*-Exclamatives in Catalan. In *Proceedings of Sinn und Bedeutung 11*, ed. Estela Puig-Waldemüller, 134–149. Barcelona: Universitat Pombeu Fabra.
Chamberlain, Montague. 1899. *Maliseet Vocabulary*. Cambridge, MA: Harvard Cooperative Society.
Chen, Tingchun. 2018. Multiple Case Assignment: An Amis Case Study. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Chomsky, Noam. 1973. Conditions on transformations. In *A Festschrift for Morris Halle*, ed. Stephen R. Anderson and Paul Kiparsky, 287–307. New York: Holt, Rinehart, and Winston.
Chomsky, Noam. 1977. On *Wh*-movement. In *Formal Syntax*, ed. Peter Culicover, Thomas Wasow, and Adrian Akmajian, 71–132. New York: Academic Press.
Chomsky, Noam. 1995. *The Minimalist Program*. Cambridge: MIT Press.
Chomsky, Noam. 2000. Minimalist inquiries: The framework. In *Step by Step – Essays in Minimalist Syntax in Honor of Howard Lasnik*, ed. Roger Martin, David Michaels, Juan Uriagereka, and Samuel Jay Keyser, 89–156. Cambridge, MA: MIT Press.
Chomsky, Noam. 2001. Derivation by Phase. In *Ken Hale: A Life in Language*, ed. Michael Kenstowicz, 1–52. Cambridge, MA: MIT.
Cinque, Guglielmo. 1996. *Italian Syntax and Universal Grammar*. Number 77 in Cambridge Studies in Linguistics. Cambridge: Cambridge University Press.
Cinque, Guglielmo. 1999. *Adverbs and Functional Heads: A Cross-Linguistic Perspective*. Oxford Studies in Comparative Syntax. Oxford: Oxford University Press.
Citko, Barbara. 2014. *Phase Theory: An Introduction*. Number 8 in Research Surveys in Linguistics. Cambridge: Cambridge University Press.
Clem, Emily. 2022. Cyclic Expansion in Agree: Maximal Projections As Probes. *Linguistic Inquiry* 54:39–78.
Colley, Justin. 2018. Object movement derives object preference. In *Proceedings of NELS 48*, ed. Sherry Hucklebridge and Max Nelson, volume 1, 149–162. Amherst: GLSA.
Colley, Justin, and Dmitry Privoznov. 2020. On the topic of subjects: composite probes in Khanty. In *Proceedings of NELS 50*, ed. Mariam Asatryan, Yixiao Song, and Ayana Whitmal, volume 1, 111–124. Amherst: GLSA.
Collins, Chris, and Höskuldur Thráinsson. 1996. VP-Internal Structure and Object Shift in Icelandic. *Linguistic Inquiry* 27:391–444.
Compton, Richard. 2016. Mutually conditioned mood and object agreement in Inuit. In *Proceedings of NELS 46*, ed. Christopher Hammerly and Brandon Prickett, volume 1, 241–250. Amherst:

GLSA.
Compton, Richard. 2018. Left periphery φ-agreement and A-movement in Inuktitut. In *Proceedings of NELS 48*, ed. Sherry Hucklebridge and Max Nelson, volume 1, 163–172. Amherst: GLSA.
Cook, Clare. 2014. *The Clause-Typing System of Plains Cree: Indexicality, Anaphoricity, and Contrast*. Number 2 in Oxford Studies of Endangered Languages. Oxford: Oxford University Press.
Cook, Clare, and Jeffrey Muehlbauer. 2006. The Behaviour of Obviation in Elicitation. In *Actes du 37e Congrès des Algonquinistes*, ed. H. C. Wolfart, 103–129. Winnipeg: Univerisity of Manitoba.
Coon, Jessica, and Alan Bale. 2014. The interaction of person and number in Mi'gmaq. *Nordlyd: Special issue on Features* 40:85–101.
Coon, Jessica, and Stefan Keine. 2021. Feature Gluttony. *Linguistic Inquiry* 52:655–710.
Coppock, Elizabeth, and Stephen Wechsler. 2018. The proper treatment of egophoricity in Kathmandu Newari. In *Expressing the Self: Cultural Diversity and Cognitive Universals*, ed. Minyao Huang and Kasia M. Jszczolt, 40–57. Oxford: Oxford University Press.
Corr, Alice. 2017. Ibero-Romance and the syntax of the utterance. Doctoral Dissertation, University of Cambridge, Cambridge.
Cowell, Andrew, and Alonzo Moss, Sr. 2008. *The Arapaho Language*. Boulder: University Press of Colorado.
Cuervo, María Cristina. 2003. Datives at large. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Côté, Marie-Hélène. 1999. Quantification existentielle sur des événements et structure des pseudorelatives [Existential quantification over events and structure of pseudorelatives]. In *Empirical Issues in Syntax and Semantics 2*, ed. Francis Corblin, Carmen Dobrovie-Sorin, and Jean-Marie Marandin, 169–190. The Hague: Holland Academic Graphics.
Dahlstrom, Amy. 1987. Discontinuous constituents in Fox. In *Native American Languages and Grammatical Typology*, ed. Paul Kroeber and Robert Moore, 53–73. Bloomington: Indiana University Linguistics Club.
Dahlstrom, Amy. 1988. Independent pronouns in Fox. In *In Honor of Mary Haas: From the Haas Festival Conference on Native American Linguistics*, ed. William Shipley, 165–194. Berlin and New York: Mouton de Gruyter.
Dahlstrom, Amy. 1991. *Plains Cree Morphosyntax*. New York: Garland Publishing.
Dahlstrom, Amy. 1995. Motivation vs. predictability in Algonquian gender. In *Papers of the 26th Algonquian Conference*, ed. David H. Pentland, 52–66. Winnipeg: Univerisity of Manitoba.
Dahlstrom, Amy. 2014. Multiple Oblique Arguments in Meskwaki. In *Papers of the 42nd Algonquian Conference*, ed. J. Randolph Valentine and Monica Macaulay, 56–68. Albany: SUNY Press.
Dahlstrom, Amy. 2015. Meskwaki (Fox) Syntax. Manuscript, University of Chicago.
Dahlstrom, Amy. 2017a. Obviation and Information Structure in Meskwaki. In *Papers of the 46th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 39–54. East Lansing: Michigan State University Press.
Dahlstrom, Amy. 2017b. Seeking consensus on the fundamentals of Algonquian word order. In *Papers of the 45th Algonquian Conference*, ed. Monica Macaulay and J. Randolph Valentine, 59–72. East Lansing: Michigan State University Press.
Dahlstrom, Amy. 2023. Ditransitive licensing of Long Distance Agreement in Meskwaki. In *Papers of the 52nd Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 19–36. East Lansing: Michigan State University Press.

Davis, Colin. 2020. The Linear Limitations of Syntactic Derivations. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Dawson, Virginia, and Amy Rose Deal. 2019. Third readings by semantic scope lowering: Prolepsis in Tiwa. *Proceedings of Sinn Und Bedeutung* 23:329–346.

Dayal, Veneeta. 1994. Scope marking as indirect *wh*-dependency. *Natural Language Semantics* 2:137–170.

Deal, Amy Rose. 2015a. Interaction and satisfaction in φ-agreement. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özyıldız, 179–192. Amherst, MA: GLSA.

Deal, Amy Rose. 2015b. A note on Nez Perce verb agreement, with sample paradigms. In *Proceedings of the International Conference on Salish and Neighbouring Languages 50*, ed. Natalie Weber, Erin Guntly, Zoe Lam, and Sihwei Chen, 389–413. Vancouver, BC: UBC Working Papers in Linguistics.

Deal, Amy Rose. 2017. Covert hyperraising to object. In *Proceedings of NELS 47*, ed. Andrew Lamont and Katerina Tetzloff, 257–270. Amherst, MA: GLSA.

Deal, Amy Rose. 2020. 3-on-3 restrictions and PCC typology: a reply to Pancheva and Zubizarreta (2018). Manuscript, UC Berkeley.

Deal, Amy Rose. 2022. Interaction, Satisfaction, and the PCC. To appear in *Linguistic Inquiry*.

Deal, Amy Rose. 2023. Current models of Agree. Manuscript, UC Berkeley.

Demonte, Violeta. 1995. Dative alternation in Spanish. *Probus* 7:5–30.

Denny, J. Peter. 1978. Verb Class Meanings of the Abstract Finals in Ojibway Inanimate Intransitive Verbs. *International Journal of American Linguistics* 44:294–322.

Denny, J. Peter. 1984. Semantic verb classes and abstract finals. In *Papers of the 15th Algonquian Conference*, ed. William Cowan, 241–271. Ottawa: Carleton University.

Denny, J. Peter, and José Mailhot. 1976. The Semantics of Certain Abstract Elements in the Algonquian Verb. *International Journal of American Linguistics* 42:91–98.

Despić, Miloje, and Michael David Hamilton. 2018. Syntactic & post-syntactic aspects of Algonquian theme signs. In *Proceedings of NELS 48*, ed. Sherry Hucklebridge and Max Nelson, 207–216. Amherst, MA: GLSA.

Diesing, Molly. 1992. *Indefinites*. Number 20 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.

Diesing, Molly. 1996. Semantic variables and object shift. In *Studies in Comparative Germanic Syntax*, ed. Höskuldur Thráinsson, Samuel D. Epstein, and Steve Peter, volume 2, 66–84. Dordrecht: Kluwer.

Diesing, Molly, and Eloise Jelinek. 1995. Distributing arguments. *Natural Language Semantics* 3:123–176.

Dixon, Robert M. W. 1994. *Ergativity*. Cambridge: Cambridge University Press.

Drummond, Emily, and Zachary O'Hagan. 2020. Morphological and syntactic person restrictions in Caquinte. In *Proceedings of NELS 50*, ed. Mariam Asatryan, Yixiao Song, and Ayana Whitmal, volume 1, 197–206. Amherst: GLSA.

Dryer, Matthew S. 1992. A Comparison of the Obviation Systems of Kutenai and Algonquian. In *Papers of the 23rd Algonquian Conference*, ed. William Cowan, 119–163. Ottawa: Carleton University.

Dryer, Matthew S. 1997. Obviation Across Clause Boundaries in Kutenai. *Kansas Working Papers in Linguistics* 22:33–52.

Déchaine, Rose-Marie, Toni M. Cardinal, David Johnson, and Anne-Marie Kidd. 2015. Plains Cree

Personal Pronouns. In *Papers of the 43rd Algonquian Conference*, ed. J. Randolph Valentine and Monica Macaulay, 28–57. Albany: SUNY Press.

Déchaine, Rose-Marie, and Martina Wiltschko. 2002a. Decomposing pronouns. *Linguistic Inquiry* 22:409–442.

Déchaine, Rose-Marie, and Martina Wiltschko. 2002b. The position of negation and its consequences. In *Proceedings of WSCLA VII: The Seventh Workshop on Structure and Constituency in Languages of the Americas*, ed. Leora Bar-el, Linda Tamburri Watt, and Ian Wilson, volume 10, 29–42. Vancouver, BC: UBC Working Papers in Linguistics.

Déchaine, Rose-Marie, and Martina Wiltschko. 2003. Negation at the Left Periphery: Evidence from Algonquian and Salish. In *Proceedings of the Thirteenth Western Conference On Linguistics*, ed. Lesley Carmichael, Chia-Hui Huang, and Vida Samiian, volume 13, 104–117. Fresno, CA: Department of Linguistics, California State University, Fresno.

Elbourne, Paul. 2005. *Situations and individuals.* Cambridge, MA: MIT Press.

Elbourne, Paul. 2008. Demonstratives as individual concepts. *Linguistics and Philosophy* 31:409–466.

Eliot, John. 1685. *Mamusse Wunneetupanatamwe Up-Biblum God: Naneeswe Nukkone Testament kah wonk Wusku Testament [The Holy Bible: Containing the Old Testament and the New].* Cambridge, MA: Samuel Green, second edition.

Elliott, Patrick D. 2020. Elements of Clausal Embedding. Doctoral Dissertation, University College London.

Erickson, Vincent O. 1978. Maliseet-Passamaquoddy. In *Handbook of North American Indians, vol. 15 (Northeast)*, ed. Bruce G. Trigger, 123–136. Washington, DC: Smithsonian Institution.

Evans, Nick. 1995. Multiple Case in Kayardild: Anti-iconic Suffix Ordering and the Diachronic Filter. In *Double Case: Agreement by Suffixaufnahme*, ed. Frans Plank, 396–428. Oxford: Oxford University Press.

Evans, Nick. 2003. Typologies of agreement: Some problems from Kayardild. *Transactions of the Philological Society* 101:203–234.

Fanselow, Gisbert, and Damir Ćavar. 2002. Distributed Deletion. In *Theoretical Approaches to Universals*, ed. Artemis Alexiadou, 65–107. Amsterdam: John Benjamins.

fermino, jessie little doe. 2000. An Introduction to Wampanoag Grammar. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

von Fintel, Kai, and Sabine Iatridou. 2023. Prolegomena to a theory of X-marking. To appear in *Linguistics & Philosophy*.

Flor, Enrico, and Stanislao Zompì. 2021. CSC-Violating Head Movement in English Conditional Inversion. URL https://ling.auf.net/lingbuzz/005853, manuscript, MIT.

Flores Nájera, Lucero. 2019. La gramática de la cláusula simple en el náhuatl de Tlaxcala [The grammar of the simple clause in the Nahuatl of Tlaxcala]. Doctoral Dissertation, CIESAS, Mexico City.

Forchheimer, Paul. 1953. *The category of person in language.* Berlin: Walter de Gruyter.

Forker, Diana. 2019. Grammatical relations in Sanzhi Dargwa. In *Argument selectors: A new perspective on grammatical relations*, ed. Alena Witzlack-Makarevich and Balthasar Bickel, number 123 in Typological Studies in Language. Amsterdam and Philadelphia: John Benjamins.

Forker, Diana. 2020. *A grammar of Sanzhi Dargwa.* Number 2 in Languages of the Caucasus. Berlin: Language Science Press.

Fox, Danny, and David Pesetsky. 2005. Cyclic Linearization of Syntactic Structure. *Theoretical*

Linguistics 31:1–45.
Francis, David A., and Robert M. Leavitt. 2008. *Peskotomuhkati Wolastoqewi Latuwewakon [A Passamaquoddy-Maliseet Dictionary].* Orono, ME: The University of Maine Press.
Frantz, Donald G. 1974. Blackfoot and Weggelaar's "The Algonquian Verb". *International Journal of American Linguistics* 40:253–256.
Frantz, Donald G. 1978. Copying from complements in Blackfoot. In *Linguistic Studies of Native Canada*, ed. Eung-Do Cook and Jonathan Kaye, 89–109. Vancouver, BC: UBC Press.
Frantz, Donald G. 1979. Multiple Dependency in Blackfoot. In *Proceedings of the 5th Annual Meeting of the Berkeley Linguistics Society*, ed. Christine Chiarello, John Kingston, Eve E. Sweetser, James Collins, Haruko Kawasaki, John Manley-Buser, Dorothy W. Marschak, Catherine O'Connor, David Shaul, Marta Toey, Henry Thompson, and Katherine Turner, 77–80. Berkeley: Berkeley Linguistics Society.
Frantz, Donald G. 1980. Ascensions to Subject in Blackfoot. In *Proceedings of the 6th Annual Meeting of the Berkeley Linguistics Society*, ed. Bruce R. Caron, Meredith A. B. Hoffman, Marilyn Silva, Jeanne Van Oosten, Danny Keith Alford, Karen Ann Hunold, Monica Macaulay, and John Manley-Buser, 293–299. Berkeley: Berkeley Linguistics Society.
Frantz, Donald G. 1991. *Blackfoot grammar*. Toronto: University of Toronto Press.
Frantz, Donald G. 2017. *Blackfoot Grammar*. Toronto: University of Toronto Press, third edition.
Friesen, Dianne. 2022. A Grammar of Relationship. Doctoral Dissertation, University of Victoria, Victoria, BC.
Friesen, Dianne, and Yvonne Denny. 2019. Zero morphemes of categories little *v* and Voice in Mi'kmaq. In *Proceedings of WSCLA 23*, ed. D. K. E. Reisinger and Roger Yu-Hsiang Lo, 53–61. Vancouver, BC: UBC Working Papers in Linguistics.
Fry, Brandon J., and Michael David Hamilton. 2016. Long-distance agreement in Algonquian: Accounting for syntactic variation. In *Proceedings of CLS 50*, 159–174. Chicago: Chicago Linguistic Society.
Fry, Brandon J., and Éric Mathieu. 2017. La sémantique de l'accord à longue distance en algonquin. In *Papers of the 46th Algonquian Conference*, 55–70. East Lansing: Michigan State University Press.
Fábregas, Antonio, and Teresa Cabré. 2021. Towards a syntactic account of ungrammatical clitic sequences and their repairs. In *Formal Approaches to Romance Morphosyntax*, ed. Marc-Olivier Hinzelin, Natascha Pomino, and Eva-Maria Remberger, number 576 in Linguistische Arbeiten, 91–116. Berlin and Boston: De Gruyter.
Galucio, Ana Vilacy, and Antônia Fernanda de Souza Nogueira. 2018. From object nominalization to object focus: The innovative A-alignment in the Tuparian languages (Tupian family). *Journal of Historical Linguistics* 8:95–127.
Ganenkov, Dmitry. 2022. Person agreement with inherent case DPs in Chirag Dargwa. *Natural Language & Linguistic Theory* 40:741–791.
Geis, Michael. 1970. Adverbial subordinate clauses in English. Doctoral Dissertation, MIT, Cambridge, MA.
Geis, Michael. 1975. English time and place adverbials. *Ohio State University Working Papers in Linguistics* 18:1–11.
van Gelderen, Elly. 2013. The diachrony of pronouns and demonstratives. In *In search of universal grammar: From Old Norse to Zoque*, ed. Terje Lohndal. Amsterdam: Benjamins.
Genee, Inge. 2009. What's in a morpheme? Obviation morphology in Blackfoot. *Linguistics*

47:913–944.
Georgi, Doreen. 2014. Opaque Interactions of Merge and Agree: On the Nature and Order of Elementary Operations. Doctoral Dissertation, Leipzig University, Leipzig.
Gerdts, Donna B., and Cheong Youn. 1988. Korean psych constructions: Advancement or retreat? In *Papers from the 24th Annual Regional Meeting of the Chicago Linguistic Society*, ed. Lynn MacLeod, Gary Larson, and Diane Brentari, 155–175. Chicago: Chicago Linguistic Society.
Gerdts, Donna B., and Cheong Youn. 1989. Non-Nominative Subjects in Korean. In *Harvard Studies in Korean Linguistics III: Proceedings of the 1989 Workshop on Korean Linguistics*, ed. Susumu Kuno, Young-joo Kim, John Whitman, Young-Se Kang, Ik-Hwan Lee, and Sung-Yun Bak, 235–248. Cambridge, MA: Department of Linguistics, Harvard University.
Gibbs, Anna C. 2010. Nitam Mememgwaag [The First Butterflies]. *Oshkaabewis Native Journal* 7:90–93.
Gildea, Spike. 1994. Semantic and pragmatic inverse: 'inverse alignment' and 'inverse voice' in Carib of Surinam. In *Voice and Inversion*, ed. Talmy Givón, number 28 in Typological Studies in Language, 187–230. Amsterdam and Philadelphia: John Benjamins.
Gildea, Spike. 2012. The referential hierarchy and attention. *Faits de Langues* 39:33–47.
Givón, Talmy. 1980. The binding hierarchy and the typology of complements. *Studies in Language* 4:333–377.
Givón, Talmy. 1994. The pragmatics of de-transitive voice: Functional and typological aspects of inversion. In *Voice and Inversion*, ed. Talmy Givón, number 28 in Typological Studies in Language, 3–44. Amsterdam and Philadelphia: John Benjamins.
Goddard, Ives. 1967. The Algonquian independent indicative. In *Contributions to Anthropology: Linguistics I (Algonquian)*, ed. A. D. DeBlois. Ottawa: National Museum of Canada.
Goddard, Ives. 1974. Remarks on the Algonquian Independent Indicative. *International Journal of American Linguistics* 40:317–327.
Goddard, Ives. 1979a. Comparative Algonquian. In *The Languages of Native America: Historical and Comparative Assessment*, ed. Lyle Campbell and Marianne Mithun, 70–132. Austin: University of Texas Press.
Goddard, Ives. 1979b. *Delaware verbal morphology: A descriptive and comparative study*. New York: Garland Publishing.
Goddard, Ives. 1980. Eastern Algonquian as a genetic subgrouping. In *Papers of the Eleventh Algonquian Conference*, ed. William Cowan, 143–158. Ottawa: Carleton University.
Goddard, Ives. 1983. The Eastern Algonquian Subordinative Mode and the Importance of Morphology. *International Journal of American Linguistics* 49:351–387.
Goddard, Ives. 1984. The Obviative in Fox Narrative Discourse. In *Papers of the 15th Algonquian Conference*, ed. William Cowan, 273–286. Ottawa: Carleton University.
Goddard, Ives. 1988. Post-Transformational Stem Derivation in Fox. In *Papers and Studies in Contrastive Linguistics, Volume Twenty Two: The Polish-English Constrative Project*, ed. Jacek Fisiak, 59–71. Poznań: Adam Mickiewicz University.
Goddard, Ives. 1990a. Aspects of the Topic Structure of Fox Narratives: Proximate Shifts and the Use of Overt and Inflectional NPs. *International Journal of American Linguistics* 56:317–340.
Goddard, Ives. 1990b. Primary and Secondary Stem Derivation in Algonquian. *International Journal of American Linguistics* 56:449–483.
Goddard, Ives. 1994a. *Leonard Bloomfield's Fox Lexicon: Critical Edition.* Winnipeg: Algonquian and Iroquoian Linguistics.

Goddard, Ives. 1994b. The West-to-East Cline in Algonquian Dialectology. In *Actes du 25e Congrès des Algonquinistes*, ed. William Cowan, 212–239. Ottawa: Carleton University.
Goddard, Ives. 2002. Grammatical Gender in Algonquian. In *Papers of the 33rd Algonquian Conference*, ed. H. C. Wolfart, 195–231. Winnipeg: Univerisity of Manitoba.
Goddard, Ives. 2007. Reconstruction and history of the independent indicative. In *Papers of the 38th Algonquian Conference*, ed. H. C. Wolfart, 207–271. Winnipeg: University of Manitoba.
Goddard, Ives. 2020. The paradox of partial similarity. Unami secondary-object marking and other clones of the n- endings. In *Papers of the 49th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 99–113. East Lansing: Michigan State University Press.
Goddard, Ives. 2021. *A Grammar of Southern Unami Delaware (Lenape).* Petosky, MI: Mundart Press.
Goddard, Ives, and Kathleen J. Bragdon. 1988. *Native Writings in Massachusett*. Number 185 in Memoirs of the American Philosophical Society. Philadelphia: The American Philosophical Society.
Gong, Ying. 2022. Accounting for the variation in use of Algonquian relative roots. Presentation at the 54th Algonquian Conference, University of Colorado, Boulder.
Grafstein, Ann. 1984. Argument structure and the syntax of a non-configurational language. Doctoral Dissertation, McGill University.
Grice, Paul. 1975. Logic and Conversation. In *The Logic of Grammar*, ed. Donald Davidson and Gilbert Harman, 64–75. Encino, CA: Dickenson.
Grishin, Peter. 2022. Subordinative long distance agreement in Passamaquoddy-Wolastoqey and the syntax of the inverse. Talk at the 54th Algonquian Conference, CU Boulder.
Grishin, Peter. 2023a. How to covertly move: Evidence from Passamaquoddy-Wolastoqey. Poster at NELS 53, University of Göttingen.
Grishin, Peter. 2023b. Omnivorous third person agreement in Algonquian. *Glossa* 8:1–46.
Grishin, Peter, and Will Oxford. 2022. Patterns of portmanteau robustness across Algonquian. Talk at the 54th Algonquian Conference, CU Boulder.
Grishin, Peter, and Will Oxford. 2023. Three paths to portmanteau agreement. Poster at WSCLA 26, McGill University.
Grosz, Patrick, and Pritty Patel-Grosz. 2014. Agreement and verb types in Kutchi Gujarati. In *The Lexicon-Syntax Interface: Views from South Asian Languages*, ed. Pritha Chandra and Richa Srishti. Amsterdam: John Benjamins.
Guasti, Maria Teresa. 1988. La pseudorelative et les phénomènes d'accord [The pseudorelative and phenomena of agreement]. *Rivista di Grammatica Generativa* 13:35–57.
Guasti, Maria Teresa. 1993. *Causative and Perception Verbs: A Comparative Study*. Torino: Rosenberg & Sellier.
Gutiérrez-Rexach, Javier. 1996. The Semantics of Exclamatives. In *Syntax at Sunset*, ed. Edward Garrett and Felicia Lee, number 1 in UCLA Working Papers in Syntax and Semantics, 146–162. Los Angeles: UCLA.
Gutiérrez-Rexach, Javier. 2001. Spanish Exclamatives and the Interpretation of the Left Periphery. In *Romance Languages and Linguistic Theory 1999: Selected papers from 'Going Romance' 1999, Leiden 9–11 December*, ed. Yves D'Hulst, Johan Rooryck, and Jan Schroten, number 221 in Current Issues in Linguistic Theory, 167–194. Amsterdam: John Benjamins.
Gutiérrez-Rexach, Javier. 2008. Spanish Root Exclamatives and the Syntax/Semantics Interface. *Catalan Journal of Linguistics* 7:117–133.

Haddican, Bill, and Anders Holmberg. 2019. Object symmetry effects in Germanic: Evidence for the role of case. *Natural Language & Linguistic Theory* 37:91–122.

Haegeman, Liliane. 2009. The movement analysis of temporal adverbial clauses. *English Language & Linguistics* 13:385–408.

Haegeman, Liliane. 2010. The internal syntax of adverbial clauses. *Lingua* 120:628–648.

Hagstrom, Paul. 1995. When a Passamaquoddy unstressable /ə/, That's a mora: An Optimality Theoretic approach to Passamaquoddy stress, syncope, and assimilation. MIT generals paper.

Hagstrom, Paul. 1997. Contextual Metrical Invisibility in Mohawk and Passamaquoddy. In *PF: Papers at the Interface*, ed. Benjamin Bruening, Yoonjung Kang, and Martha McGinnis, number 30 in MIT Working Papers in Linguistics, 113–181. Cambridge, MA: MIT Working Papers in Linguistics.

Halle, Morris, and Alec Marantz. 1993. Distributed Morphology and the pieces of inflection. In *The view from Building 20*, ed. Ken Hale and Samuel Jay Keyser, 111–176. Cambridge, MA: MIT Press.

Halpert, Claire. 2012. Argument licensing and agreement in Zulu. PhD Thesis, Massachusetts Institute of Technology, Cambridge, MA.

Halpert, Claire. 2015. *Argument Licensing and Agreement*. Oxford: Oxford University Press.

Hamilton, Michael David. 2013. *Wh*-movement in Mi'gmaq. In *Proceedings of the 2013 Annual Conference of the Canadian Linguistic Association*, ed. Shan Luo.

Hamilton, Michael David. 2015a. Default agreement in Mi'gmaq ditransitive constructions. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özyıldız, volume 1, 281–292. Amherst, MA: GLSA.

Hamilton, Michael David. 2015b. Phrase structure in Mi'gmaq: A configurational account of a "non-configurational" language. *Lingua* 167:19–40.

Hamilton, Michael David. 2015c. The syntax of Mi'gmaq: A configurational account. Doctoral Dissertation, McGill.

Hamilton, Michael David. 2017. Multiple instances of agreement in Mi'gmaq verbs. In *Papers of the 45th Algonquian Conference*, ed. Monica Macaulay, Margaret Noodin, and J. Randolph Valentine, 73–91. East Lansing: Michigan State University Press.

Hamilton, Michael David. 2018. On ordering and reordering arguments in Algonquian. In *Papers of the 47th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 107–128. East Lansing.

Hammerly, Christopher. 2020. Person-Based Prominence in Ojibwe. Doctoral Dissertation, University of Massachusetts Amherst, Amherst.

Hammerly, Christopher. 2021. A verb raising analysis of the Ojibwe VOS/VSO alternation: Lessons for feature copying and movement. Manuscript, University of Minnesota, Twin Cities.

Hammerly, Christopher. 2023. A set-based semantics for person, obviation, and animacy. *Language* 99:38–80.

Hammerly, Christopher, Adrian Staub, and Brian Dillon. 2022. Person-based prominence guides incremental interpretation: Evidence from obviation in Ojibwe. *Cognition* 225.

Hanink, Emily A. 2021. DP structure and internally headed relatives in Washo. *Natural Language and Linguistic Theory* 39:505–554.

Harbour, Daniel. 2008. Discontinuous agreement and the syntax-morphology interface. In *Phi Theory: Phi-features across interfaces and modules*, ed. Daniel Harbour, David Adger, and Susana Béjar, number 16 in Oxford Studies in Theoretical Linguistics, 185–220. Oxford: Oxford

University Press.
Harbour, Daniel. 2016. *Impossible Persons*. Cambridge, MA: MIT Press.
Harizanov, Boris. 2014. Clitic doubling at the syntax-morphophonology interface. *Natural Language & Linguistic Theory* 32:1033–1088.
Harley, Heidi, and Elizabeth Ritter. 2002. Person and number in pronouns: a feature-geometric analysis. *Language* 78:482–526.
Haude, Katharina, and Fernando Zúñiga. 2016. Inverse and symmetrical voice: On languages with two transitive constructions. *Linguistics* 54:443–481.
Heim, Irene. 1985. Notes on Comparatives and Related Matters. Manuscript, University of Texas, Austin.
Hengeveld, Kees, Sabine Iatridou, and Floris Roelofsen. 2022. Quexistentials and Focus. *Linguistic Inquiry* 1–54.
Hicks, Nitana. 2006. A list of initials and finals in Wôpanâak. Master's thesis, Massachusetts Institute of Technology, Cambridge, MA.
Hiraiwa, Ken. 2001. Multiple Agree and the Defective Intervention Constraint in Japanese. In *Proceedings of the 1st HUMIT Student Conference in Language Research (HUMIT 2000)*, ed. Ora Matushansky, Albert Costa, Javier Martín-González, Lance Nathan, and Adam Szczegielniak, 67–80. Cambridge, MA: MIT Working Papers in Linguistics.
Hiraiwa, Ken. 2005. Dimensions of symmetry in syntax: Agreement and clausal architecture. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Hirose, Tomio. 2003. *Origins of Predicates: Evidence from Plains Cree*. Outstanding Dissertations in Linguistics. New York: Routledge.
Hockett, Charles F. 1966. What Algonquian is really like. *International Journal of American Linguistics* 32:59–73.
Holmberg, Anders. 1986. Word Order and Syntactic Features in the Scandinavian Languages and English. Doctoral Dissertation, University of Stockholm.
Holmberg, Anders, and Christer Platzack. 1995. *The Role of Inflection in Scandinavian Syntax*. Oxford Studies in Comparative Syntax. Oxford: Oxford University Press.
Holmberg, Anders, Michelle Sheehan, and Jenneke van der Wal. 2019. Movement from the Double Object Construction Is Not Fully Symmetrical. *Linguistic Inquiry* 50:677–722.
Hornstein, Norbert. 2009. *A Theory of Syntax: Minimal Operations and Universal Grammar*. Cambridge: Cambridge University Press.
Hualde, José I. 1989. Double Object Constructions in KiRimi. In *Current Approaches to African Linguistics (vol. 5)*, ed. Paul Newman and Robert D. Botne, number 8 in African Languages and Linguistics, 179–189. Dordrecht: Foris.
Hulstaert, Gustaf. 1965. *Grammaire du lomongo. Deuxième partie: Morphologie [Grammar of LoMongo. Part two: Morphology]*. Tervuren: Royal Museum for Central Africa.
Inglis, Stephanie. 1986. The fundamentals of Micmac word formation. Master's thesis, Memorial University of Newfoundland, St. John's.
Jacques, Guillaume, and Anton Antonov. 2014. Direct/inverse systems. *Language and Linguistics Compass* 8:301–318.
Jacques, Guillaume, and Anton Antonov. 2018. The direction(s) of analogical change in direct/inverse systems. In *Typological Hierarchies in Synchrony and Diachrony*, ed. Sonia Cristofaro, number 121 in Typological Studies in Language, 257–288. Amsterdam: John Benjamins.
James, Deborah. 1984. Raising to Subject in Moose Cree: A Problem for Subjacency. In *The Syntax*

of Native American Languages, ed. Eung-Do Cook and Donna B. Gerdts, number 16 in Syntax and Semantics, 205–213. New York: Academic Press.

Jany, Carmen. 2009. *Chimariko Grammar: Areal and Typological Perspective*. Number 142 in Linguistics. Berkeley and Los Angeles: University of California Press.

Johansson, Sara. 2008. Sentience and Stem Agreement in Blackfoot. In *Papers of the 39th Algonquian Conference*, ed. Karl S. Hele and Regna Darnell, 358–377. London: The University of Western Ontario.

Johansson, Sara. 2011. Towards a Typology of Algonquian Relative Clauses. In *Proceedings of WSCLA 16*, ed. Meagan Louie and Alexis Black, 92–104. Vancouver, BC: UBC Working Papers in Linguistics.

Johansson, Sara. 2013. A participle account of Blackfoot relative clauses. *Canadian Journal of Linguistics* 58:217–238.

Johnson, Kyle. 2000. Few dogs eat Whiskers or cat Alpo. In *University of Massachusetts Occasional Papers*, volume 23, 47–60. Amherst, MA: University of Massachusetts.

Johnson, Kyle. 2002. Restoring Exotic Coordinations to Normalcy. *Linguistic Inquiry* 33:97–156.

Johnson, Kyle. 2004. In Search of the English Middle Field. Manuscript, UMass Amherst.

Johnson, Kyle. 2009. Gapping is not (VP-)ellipsis. *Linguistic Inquiry* 40:289–328.

Johnson, Meredith. 2016. New Arguments for the Position of the Verb in Potawatomi. In *Papers of the 44th Algonquian Conference*, ed. Monica Macaulay, Margaret Noodin, and J. Randolph Valentine, 157–173. Albany: SUNY Press.

Johnson, Meredith, and Bryan Rosen. 2015. The Syntax of Discontinuous Noun Phrases in Algonquian Languages: Left Branch Extractions and Focus Movements. In *Papers of the 43rd Algonquian Conference*, ed. J. Randolph Valentine and Monica Macaulay, 135–153. Albany: SUNY Press.

Johnson, Meredith, and Bryan Rosen. 2016. On the External and Internal Syntax of Menominee Negation. In *Papers of the 44th Algonquian Conference*, ed. Monica Macaulay, Margaret Noodin, and J. Randolph Valentine, 174–191. Albany: SUNY Press.

Johnson, Meredith, and Bryan Rosen. 2017. On Menominee Verb Stems and the Noncomplexity of Verb Finals. In *Papers of the 45th Algonquian Conference*, ed. Monica Macaulay, Margaret Noodin, and J. Randolph Valentine, 93–114. East Lansing: Michigan State University Press.

Joshi, Kinjal. 2021. A uniform account for the agreement & information structure relationship: A case study of Surati Gujarati. Doctoral Dissertation, University of Oslo, Oslo.

Junker, Marie-Odile. 1994. Syntaxe du quantifieur universel en algonquin [Syntax of the universal quantifier in Algonquin]. *Canadian Journal of Linguistics* 39:1–13.

Kachru, Yamuna, Braj B. Kachru, and Tej K. Bhatia. 1976. The Notion 'Subject': a Note on Hindi-Urdu, Kashmiri, and Panjabi. In *The Notion of Subject in South Asian Languages*, ed. Manindra K. Verma, number 2 in South Asian Studies, 79–108. Madison: University of Wisconsin.

Kathol, Andreas, and Richard A. Rhodes. 1999. Constituency and Linearization of Ojibwe Nominals. In *Proceedings of WSCLA 4*, ed. Marion Caldecott, Suzanne Gessner, and Eun-Sook Kim, 75–91. Vancouver, BC: UBC.

Kayne, Richard S. 1975. *French Syntax: The Transformational Cycle*. Number 6 in Current Studies in Linguistics. Cambridge, MA: MIT Press.

Kazenin, Konstantin I., and Yakov G. Testelets. 2004. Where coordination meets subordination: Converb constructions in Tsakhur (Daghestanian). In *Coordinating Constructions*, ed. Martin Haspelmath, number 58 in Typological Studies in Language, 227–239. Amsterdam: John Benjamins.

Ke, Hezao. 2019. The Syntax, Semantics and Processing of Agreement and Binding Grammatical Illusions. Doctoral Dissertation, University of Michigan.

Keenan, Edward L., and Bernard Comrie. 1977. Noun Phrase Accessibility and Universal Grammar. *Linguistic Inquiry* 8:63–99.

Kegg, Maude, and John D. Nichols. 1991. *Portage Lake: Memories of an Ojibwe Childhood*. Edmonton: The University of Alberta Press.

Keine, Stefan. 2017. Agreement and *v*P phases. In *A Schrift to Fest Kyle Johnson*, ed. Nicholas LaCara, Keir Moulton, and Anne-Michelle Tessier, number 1 in Linguistics Open Access Publications, 177–185. Amherst, MA: University of Massachusetts Amherst.

Keine, Stefan. 2020a. Locality Domains in Syntax: Evidence from Sentence Processing. *Syntax* 23:101–151.

Keine, Stefan. 2020b. *Probes and Their Horizons*. Number 81 in Linguistic Inquiry Monographs. Cambridge, MA: Cambridge University Press.

Keine, Stefan, and Hedde Zeijlstra. 2022. Clause-internal successive cyclicity: phasality or DP intervention? Manuscript, UCLA and Göttingen University.

Kelley, Tracy M. 2020. Kun8seeh—An Online Approach to Teaching & Learning Conversational Wôpanâôt8âôk. Master's thesis, Massachusetts Institute of Technology, Cambridge, MA.

Kim, Kyumin. 2020. Oblique nominals, a verbal affix and late merge. *Linguistics* 58:1737–1773.

Kinyalolo, Kasangati K. W. 1991. Syntactic dependencies and the spec-head agreement hypothesis in KiLega. Doctoral Dissertation, UCLA.

Klaiman, M. H. 1991. *Grammatical Voice*. Number 59 in Cambridge Studies in Linguistics. Cambridge: Cambridge University Press.

Klaiman, M. H. 1992. Inverse languages. *Lingua* 88:227–261.

Klamer, Marian. 1997. Spelling out clitics in Kambera. *Linguistics* 35:895–927.

van Koppen, Marjo. 2005. One Probe – Two Goals: Aspects of agreement in Dutch dialects. Doctoral Dissertation, Leiden University, Leiden.

van Koppen, Marjo. 2007. Agreement with (the internal structure of) copies of movement. In *The Copy Theory of Movement*, ed. Norbert Corver and Jairo Nunes, number 107 in Linguistic Aktuell, 327–350. Amsterdam and Philadelphia: John Benjamins.

Korotkova, Natasha. 2016. Heterogeneity and uniformity in the evidential domain. Doctoral Dissertation, UCLA.

Korotkova, Natasha. 2021. The Embedding Puzzle: Constraints on Evidentials in Complement Clauses. *Linguistic Inquiry* 52:210–226.

Kotek, Hadas. 2018. *Composing Questions*. Number 80 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.

Kramer, Ruth. 2014. Clitic doubling or object agreement: the view from Amharic. *Natural Language & Linguistic Theory* 32:593–634.

Kratzer, Angelika. 1998. Scope or Pseudoscope? Are there Wide-Scope Indefinites? In *Events and Grammar*, ed. Susan Rothstein, volume 70 of *Studies in Linguistics and Philosophy*, 163–196. Dordrecht: Springer.

Kratzer, Angelika. 2006. Decomposing Attitude Verbs. Talk at in honor of Anita Mittwoch at The Hebrew University of Jerusalem.

Kratzer, Angelika. 2009. Making a Pronoun: Fake Indexicals as Windows into the Properties of Pronouns. *Linguistic Inquiry* 40:187–237.

Kubota, Yusuke, and Jungmee Lee. 2015. The coordinate structure constraint as a discourse-oriented principle: Further evidence from Japanese and Korean. *Language* 91:642–675.

Kuno, Susumu, and Jane J. Robinson. 1972. Multiple Wh Questions. *Linguistic Inquiry* 3:463–487.

de Lacy, Paul V. 2006. *Markedness: Reduction and preservation in phonology*. Cambridge: Cambridge University Press.

Lakoff, George. 1986. Frame semantic control of the Coordinate Structure Constraint. In *Papers of the Parasession on Pragmatics and Grammatical Theory, Chicago Linguistic Society 22*, ed. Anne Farley, Peter Farley, and Karl-Erik McCullough, 152–167. Chicago: Chicago Linguistic Society.

Larson, Richard K. 1987. "Missing prepositions" and the analysis of English free relative clauses. *Linguistic Inquiry* 18:239–266.

Laurent, Joseph. 1884. *New Familiar Abenakis and English Dialogues: The first ever published on the grammatical system.* Québec City: Leger Brousseau.

Leavitt, Robert M. 1996. *Passamaquoddy-Maliseet*. Number 27 in LANGUAGES OF THE WORLD/Materials. Munich and Newcastle: LINCOM EUROPA.

Legate, Julie Anne. 2014. *Voice and v: Lessons from Acehnese.* Cambridge: Cambridge University Press.

Leman, Wayne. 1986. Cheyenne Complementation. Manuscript, University of Oregon.

LeSourd, Philip S. 1988. Accent and syllable structure in Passamaquoddy. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

LeSourd, Philip S. 1993. *Accent & Syllable Structure in Passamaquoddy*. New York and London: Routledge.

LeSourd, Philip S. 1995. Diminutive Verb Forms in Passamaquoddy. *International Journal of American Linguistics* 61:103–134.

LeSourd, Philip S. 2000. The Passamaquoddy "Witchcraft Tales" of Newell S. Francis. *Anthropological Linguistics* 42:441–498.

LeSourd, Philip S. 2004. The Internal Structure of the Noun Phrase in Maliseet-Passamaquoddy. In *Papers of the 35th Algonquian Conference*, ed. H. C. Wolfart, 239–263. Winnipeg: University of Manitoba.

LeSourd, Philip S. 2006. Problems for the Pronominal Argument Hypothesis in Maliseet-Passamaquoddy. *Language* 82:486–514.

LeSourd, Philip S. 2010. On raising to object in Maliseet-Passamaquoddy. In *Proceedings of WSCLA 13 & 14*, ed. Heather Bliss and Raphael Girard, 171–182. Vancouver, BC: UBC Working Papers in Linguistics.

LeSourd, Philip S. 2014. Prepositional Phrases in Maliseet-Passamaquoddy. *International Journal of American Linguistics* 80:209–240.

LeSourd, Philip S. 2019a. Raising and long-distance agreement in Passamaquoddy: A unified analysis. *Journal of Linguistics* 55:357–405.

LeSourd, Philip S. 2019b. Second-Position Enclitics Occur within Constituents in Maliseet-Passamaquoddy. In *Papers of the 48th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 107–121. East Lansing: Michigan State University Press.

LeSourd, Philip S. 2021. Reflections of Passamaquoddy Shamanism in a Nineteenth-Century Text. In *Webs of Relationships and Words from Long Ago: A Festschrift Presented to Ives Goddard on the Occasion of His 80th Birthday*, ed. Lucy Thomason, David J. Costa, and Amy Dahlstrom, 191–210. Petosky, MI: Mundart Press.

Levin, Theodore. 2017. Successive-cyclic case assignment: Korean nominative-nominative case-

stacking. *Natural Language and Linguistic Theory* 35:447–498.
Lewis, Robert E. 2019. Theme Signs in Potawatomi as Object Agreement and the Inverse. In *Papers of the 48th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 123–142. East Lansing: Michigan State University Press.
Lin, Vivian. 2002. Coordination and sharing at the interfaces. Doctoral Dissertation, MIT.
Little, Carol-Rose, and Mary Moroney. 2016. Modeling obviation in Algonquian. In *Proceedings of the Ninth Conference on the Semantics of Under-Represented Languages in the Americas*, ed. Thuy Bui and Rudmila-Rodica Ivan, 71–86. Amherst, MA: GLSA.
Lochbihler, Bethany. 2012. Aspects of Argument Licensing. Doctoral Dissertation, McGill University.
Lochbihler, Bethany, and Éric Mathieu. 2013. Wh-agreement in Ojibwe relative clauses: Evidence for CP structure. *Canadian Journal of Linguistics* 58:293–318.
Lochbihler, Bethany, and Éric Mathieu. 2016. Clause Typing and Feature Inheritance of Discourse Features. *Syntax* 19:354–391.
Lockwood, Hunter Thompson. 2017. How the Potawatomi Language Lives: A Grammar of Potawatomi. Doctoral Dissertation, University of Wisconsin Madison, Madison.
Lohninger, Magdalena, Iva Kovač, and Susi Wurmbrand. 2022. From Prolepsis to Hyperraising. *Philosophies* 7.
Long, Michelle. 1999. Adverbial and Argument-Doubling Clauses in Cree. Master's thesis, University of Manitoba.
Longenbaugh, Nicholas, and Maria Polinsky. 2018. Equidistance returns. *The Linguistic Review* 35:413–461.
López, Luis. 2012. *Indefinite Objects: Scrambling, Choice Functions, and Differential Marking*. Number 63 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.
Macaulay, Monica. 2003. Negation, Dubitatives and Mirativity in Menominee. In *Papers of the 34th Algonquian Conference*, ed. H. C. Wolfart, 217–240. Winnipeg: University of Manitoba.
Macaulay, Monica, and Hunter Thompson Lockwood. 2023. Algonquian Components Bibliography. URL https://nisinoon.net/bibliography/, manuscript, University of Wisconsin-Madison and Myaamia Center, Miami University.
Magier, David S. 1983. Topics in the Grammar of Marwari. Doctoral Dissertation, UC Berkeley, Berkeley.
Makepeace, Anne. 2010. We Still Live Here: *Âs Nutayuneân*.
Marantz, Alec. 1991. Case and licensing. In *Proceedings of the 8th Eastern States Conference on Linguistics (ESCOL 8)*, ed. German Westphal, Benjamin Ao, and Hee-Rahk Chae, 234–253. Ithaca, NY: CLC Publications.
Marlo, Michael R. 2014. Exceptional patterns of object marking in Bantu. *Studies in African Linguistics* 43:73–112.
Marlo, Michael R. 2015. On the number of object markers in Bantu languages. *Journal of African Languages and Linguistics* 36:1–65.
Massam, Diane. 1985. Case theory and the projection principles. Ph.D. dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Mathieu, Éric. 2007a. Petite syntaxe des finales concrètes en ojibwe [Small syntax of concrete finals in Ojibwe]. In *Papers of the 38th Algonquian Conference*, ed. H. C. Wolfart, 295–321. Winnipeg: Univerisity of Manitoba.
Mathieu, Éric. 2007b. The syntax of abstract and concrete finals in Ojibwe. In *Proceedings of NELS*

37, ed. Emily Elfner and Martin Walkow, volume 2, 101–114. Amherst, MA: GLSA.
Mathieu, Éric, Brandon J. Fry, and Michael Barrie. 2017. Adjunction of complex heads inside words: A reply to Piggott and Travis (2013). In *The Structure of Words at the Interfaces*, ed. Heather Newell, Máire Noonan, Glyne Piggott, and Lisa deMena Travis, number 68 in Oxford Studies in Theoretical Linguistics, 240–260. Oxford: Oxford University Press.
Matthewson, Lisa. 1999. On the interpretation of wide-scope indefinites. *Natural Language Semantics* 7:79–134.
Matthewson, Lisa. 2004. On the Methodology of Semantic Fieldwork. *International Journal of American Linguistics* 70:369–415.
McClay, Elise. 2012. Possession in Mi'gmaq. Honors thesis, McGill.
McCulloch, Gretchen. 2013. Verb Stem Composition in Mi'gmaq. Master's thesis, McGill University, Montreal.
McGinnis, Martha. 1995. Word-internal syntax: Evidence from Ojibwa. In *Proceedings of the 1995 CLA Annual Conference*, ed. Päivi Koskinen, 337–347. Toronto: Toronto Working Papers in Linguistics.
McGinnis, Martha. 1998. Locality in A-movement. Doctoral Dissertation, MIT.
McGinnis, Martha. 1999. Is There Syntactic Inversion in Ojibwa? In *Papers from the Workshop on Structure and Constituency in Native American Languages*, ed. Leora Bar-el, Rose-Marie Déchaine, and Charlotte Reinholtz, volume 17, 101–118. Cambridge, MA: MIT Working Papers in Linguistics.
McGinnis, Martha. 2001. Phases and the syntax of applicatives. In *Proceedings of NELS 31*, ed. Minjoo Jim and Strauss, volume 2, 333–349. Amherst: GLSA.
McKenzie, Andrew. 2015. A Survey of Switch-Reference in North America. *International Journal of American Linguistics* 81:409–448.
Mendes, Gesoel, and Rodrigo Ranero. 2021. Chain Reduction via Substitution: Evidence from Mayan. *Glossa* 6:1–31.
Merchant, Jason. 2006. Polyvalent case, geometric hierarchies, and split ergativity. In *Proceedings of the 42nd Annual Meeting of the Chicago Linguistics Society*, ed. Jackie Bunting, Sapna Desai, Robert Peachey, Chris Straughn, and Zuzana Tomkova, volume 2, 47–67. Chicago: Chicago Linguistic Society.
Mohanan, Tara. 1990. Arguments in Hindi. Doctoral Dissertation, Stanford University, Stanford.
Mohanan, Tara. 1994. *Argument structure in Hindi.* Dissertations in Linguistics. Stanford: CSLI Publications.
Moulton, Keir. 2009. Natural Selection and the Syntax of Clausal Complementation. Doctoral Dissertation, University of Massachusetts Amherst, Amherst.
Moulton, Keir. 2015. CPs: Copies and Compositionality. *Linguistic Inquiry* 46:305–342.
Moulton, Keir, and Nino Grillo. 2015. Pseudo-Relatives: Big and Direct. In *Proceedings of NELS 45*, ed. Thuy Bui and Deniz Özyıldız, 193–202. Amherst, MA: GLSA.
Močnik, Maša, and Rafael Abramovitz. 2019. A variable-force variable-flavor attitude verb in Koryak. In *Proceedings of the 22nd Amsterdam Colloquium*, ed. Julian J. Schlöder, Dean McHugh, and Floris Roelofsen, 494–503.
Muehlbauer, Jeffrey. 2008. *kâ-yôskâtahk ôma nêhiyawêwin*: The Representation of Intentionality in Plains Cree. Doctoral Dissertation, UBC.
Muehlbauer, Jeffrey. 2012. The Relation of Switch-Reference, Animacy, and Obviation in Plains Cree. *International Journal of American Linguistics* 78:203–238.

Muehlbauer, Jeffrey. 2015. A ”Presence” Paradigm in Plains Cree: Context, Form, and Content. *Anthropological Linguistics* 57:275–313.

Muysken, Pieter. 1981. Quechua word structure. In *Filters and Binding*, ed. Frank Heny, 279–329. London: Longman.

Myler, Neil. 2017. Cliticization feeds agreement: a view from Quechua. *Natural Language and Linguistic Theory* 35:751–800.

Müller, Gereon. 2001. Order Preservation, Parallel Movement, and the Emergence of the Unmarked. In *Optimality-Theoretic Syntax*, ed. Géraldine Legendre, Jane Grimshaw, and Sten Vikner, 279–313. Cambridge, MA: MIT Press.

Nevins, Andrew. 2007. The representation of third person and its consquences for person-case effects. *Natural Language & Linguistic Theory* 25:273–313.

Nevins, Andrew. 2011. Multiple agree with clitics: person complementarity vs. omnivorous number. *Natural Language & Linguistic Theory* 29:939–971.

Newell, Wayne A., and Robert M. Leavitt, ed. 2020. *Kuhkomossonuk Akonutomuwinokot: Stories Our Grandmothers Told Us.* Robbiston, ME: Resolute Bear Press.

Newman, Elise. 2021a. The (in)distinction between wh-movement and c-selection. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Newman, Elise. 2021b. *v*P infinitives in Wolof: On Ā-movement to Spec *v*P. In *Celebrating 50 years of ACAL: Selected papers from the 50th Annual Conference on African Linguistics*, ed. Akinbiyi Akinlabi, Lee Bickmore, Michael Cahill, Michael Diercks, Laura J. Downing, James Essegbey, Katie Franich, Laura McPherson, and Sharon Rose, 225–244. Berlin: Language Science Press.

Ng, Eve. 1999. Some Data from the Intonational Segmentation of Four Passamaquoddy Texts. In *Papers of the 30th Algonquian Conference*, ed. David H. Pentland, 190–205. Winnipeg: University of Manitoba.

Ng, Eve. 2002. Demonstrative words in the Algonquian language Passamaquoddy: A descriptive and grammaticalization analysis. Doctoral Dissertation, State University of New York at Buffalo.

Ngonyani, Deo, and Peter Githinji. 2006. The asymmetric nature of Bantu applicative constructions. *Lingua* 116:31–63.

Nichols, John D. 1980. Ojibwe Morphology. Doctoral Dissertation, Harvard University.

Noyer, Rolf. 1992. Features, positions and affixes in autonomous Morphological Structure. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Olson, Erin. 2018. Pitch accent drives stress placement in Passamaquoddy-Maliseet. MIT generals paper.

O’Meara, John. 1990. Delaware stem morphology. Doctoral Dissertation, McGill University.

O’Meara, John. 1995. Productivity and Levels of Derivation in Munsee Delaware Word Formation. In *Papers of the 26th Algonquian Conference*, ed. David H. Pentland, 335–349. Winnipeg: University of Manitoba.

Ormazabal, Javier, and Juan Romero. 1998. On the Syntactic Nature of the me-lui and the Person-Case Constraint. *Anuario del Seminario de Filología Vasca «Julio de Urquijo»* 32:415–433.

Oshima, David Y. 2007. Syntactic direction and obviation as empathy-based phenomena: a typological approach. *Linguistics* 45:727–763.

Oxford, Will. 2014. Microparameters of Agreement: A Diachronic Perspective on Algonquian Verb Inflection. Doctoral Dissertation, University of Toronto.

Oxford, Will. 2015. Probe competition as a source of ergative person splits. In *Proceedings of NELS*

45, ed. Thuy Bui and Deniz Özyıldız, volume 2, 213–222. Amherst, MA: GLSA.

Oxford, Will. 2016. From head-final to head-initial in Algonquian: Evidence and implications. *Toronto Working Papers in Linguistics* 37.

Oxford, Will. 2017a. The Activity Condition as a microparameter. *Linguistic Inquiry* 48:711–722.

Oxford, Will. 2017b. Algonquian grammar myths. *Toronto Working Papers in Linguistics* 39.

Oxford, Will. 2017c. Inverse Marking as Impoverishment. In *Proceedings of the 34th West Coast Conference on Formal Linguistics*, ed. Aaron Kaplan, Abby Kaplan, Miranda K. McCarvel, and Edward J. Rubin, 413–422. Somerville, MA: Cascadilla Proceedings Project.

Oxford, Will. 2017d. Size matters: Deriving person hierarchies from nominal structure. Manuscript, University of Manitoba.

Oxford, Will. 2018. What's the Inverse of an Inverse? Transitive Constructions in Algonquian and Austronesian. In *Actes du congrès annuel de l'Association canadienne de linguistique 2018*, ed. Emily Dmyterko. Canadian Linguistics Society.

Oxford, Will. 2019a. Fission in Algonquian and the status of morphological templates. In *Proceedings of the Workshop on the Structure and Constituency of Languages of the Americas 23*, ed. D. K. E. Reisinger and Roger Yu-Hsiang Lo, 77–91. Vancouver, BC: UBC Working Papers in Linguistics.

Oxford, Will. 2019b. Inverse marking and Multiple Agree in Algonquin: Complementarity and variability. *Natural Language & Linguistic Theory* 37:955–996.

Oxford, Will. 2020a. Elsewhere morphology and alignment variation: Evidence from Algonquian. Plenary talk at NELS 51, UQAM.

Oxford, Will. 2020b. When Direct and Inverse Are Asymmetrical. In *Papers of the 49th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 201–222. East Lansing: Michigan State University Press.

Oxford, Will. 2021. An illusory subject preference in Algonquian agreement. *Canadian Journal of Linguistics* 66:412–430.

Oxford, Will. 2022. Probe specification and agreement variation: Evidence from the Algonquian inverse. *Linguistic Inquiry* .

Oxford, Will. 2023a. Algonquian language maps. URL http://home.cc.umanitoba.ca/~oxfordwr/algling/maps.html, manuscript, University of Manitoba.

Oxford, Will. 2023b. Algonquian linguistics bibliography. URL http://home.cc.umanitoba.ca/~oxfordwr/algling/bib.html, manuscript, University of Manitoba.

Oxford, Will. 2023c. Direct, Inverse, and Neutral: Refining the Description of Algonquian Transitive Verb Forms. In *Papers of the 52nd Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 223–244. East Lansing: Michigan State University Press.

Oxford, Will. 2023d. A tale of two inverses. To appear in *Syntax*.

Paskemin, Myron, and Donna Paskemin. 2002. Incorporating Traditional Nehiyaw/Plains Cree Education in the University. In *Indigenous Languages Across the Community*, ed. Barbara Jane Burnaby and Jon Allan Reyhner, 175–182. Flagstaff: Northern Arizona University.

Pentland, David H. 1979. Algonquian Historical Phonology. Doctoral Dissertation, University of Toronto, Toronto.

Pentland, David H. 1999. The morphology of the Algonquian independent order. In *Papers of the 30th Algonquian Conference*, ed. David H. Pentland, 222–266. Winnipeg: University of Manitoba.

Pentland, David H., and H. C. Wolfart. 1982. *Bibliography of Algonquian linguistics*. Winnipeg:

University of Manitoba Press.
Pereltsvaig, Asya. 2008. Split phrases in colloquiual Russian. *Studia Linguistica* 62:5–38.
Pescarini, Diego. 2010. Elsewhere in Romance: Evidence from clitic clusters. *Linguistic Inquiry* 41:427–444.
Pesetsky, David. 1987. *Wh*-in-situ: Movement and unselective binding. In *The Representation of (In)definiteness*, ed. Eric Reuland and Alice G. B. ter Meulin, number 14 in Current Studies in Linguistics. Cambridge, MA: MIT Press.
Pesetsky, David. 2000. *Phrasal Movement and Its Kin*. Number 37 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.
Pesetsky, David. 2013. *Russian Case Morphology and the Syntactic Categories*. Number 66 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.
Pesetsky, David. 2021. Exfoliation: towards a derivational theory of clause size. Manuscript, MIT.
Pesetsky, David, and Esther Torrego. 2001. T-to-C movement: Causes and consequences. In *Ken Hale: A life in language*, ed. Michael Kenstowicz, 355–425. Cambridge, MA: MIT Press.
Pietraszko, Asia. 2023. Timing-driven derivation of a NOM/ACC agreement pattern. *Glossa* 8:1–55.
Piriyawiboon, Nattaya. 2007. Algonquian Obviation Reanalysis. In *Proceedings of the 2007 Annual Conference of the Canadian Linguistic Association*, ed. Milica Radišić.
Polinsky, Maria, and Eric Potsdam. 2001. Long-distance agreement and topic in Tsez. *Natural Language and Linguistic Theory* 19:583–646.
Portner, Paul. 1992. Situation theory and the semantics of propositional expressions. Doctoral Dissertation, University of Massachusetts Amherst.
Portner, Paul, and Aynat Rubinstein. 2020. Desire, belief, and semantic composition: variation in mood selection with desire predicates. *Natural Language Semantics* 28:343–393.
Postal, Paul M. 1998. *Three Investigations of Extraction*. Number 29 in Current Studies in Linguistics. Cambridge, MA: MIT Press.
Preminger, Omer. 2009. Breaking Agreements: Distinguishing Agreement and Clitic Doubling by Their Failures. *Linguistic Inquiry* 40:619–666.
Preminger, Omer. 2014. *Agreement and its failures*. Number 68 in Linguistic Inquiry Monographs. Cambridge, MA: MIT Press.
Preminger, Omer. 2019a. What are φ-features supposed to do, and where? Talk at Thirty million theories of features, University of Tromsø.
Preminger, Omer. 2019b. What the PCC tells us about "abstract" agreement, head movement, and locality. *Glossa* 4:1–42.
Prince, J. Dyneley. 1914. The Morphology of the Passamaquoddy Language of Maine. *Proceedings of the American Philosophical Society* 53:92–117.
Privoznov, Dmitry. 2020. Obviation in Maliseet-Passamaquoddy. Handout, Passamaquoddy Workshop, MIT.
Privoznov, Dmitry. 2021. A theory of two strong islands. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Proulx, Paul. 1982. The Origin of the Absolute Verbs of the Algonquian Independent Order. *International Journal of American Linguistics* 48:394–411.
Proulx, Paul. 1984. Algonquian Objective Verbs. *International Journal of American Linguistics* 50:403–423.
Proulx, Paul. 1990. Proto-Algonquian Verb Inflection. *Kansas Working Papers in Linguistics*

15:100–145.
Quinn, Conor. 2004. Head parameterization at the multiclausal level: clause-chaining as episodic macroevents in Altaic-area languages. WAFL 2, Boğaziçi University.
Quinn, Conor. 2006. Referential-Access Dependency in Penobscot. Doctoral Dissertation, Harvard University.
Quinn, Conor. 2007. The Eastern Algonquian Subordinative as Event-Argument Dependency. 39th Algonquian Conference, York University.
Quinn, Conor. 2011. Algonquian linguistics. In *Oxford Bibliographies Online: Linguistics*, ed. Mark Aronoff, Oxford Bibliographies. Oxford: Oxford University Press.
Quinn, Conor. 2019. Productivity vs predictability: Evidence for the syntax and semantics of Animate gender in four Northeastern-area Algonquian languages. In *Gender and Noun Classification*, ed. Éric Mathieu, Myriam Dali, and Gita Zareikar, 249–265. Oxford: Oxford University Press.
Radford, Andrew. 1977. *Italian Syntax: Transformational and Relational Grammar*. Number 21 in Cambridge Studies in Linguistics. Cambridge: Cambridge University Press.
Rafel, Joan. 2000. Complex Small Clauses. Doctoral Dissertation, Universitat Autònoma de Barcelona.
Ramchand, Gillian, and Peter Svenonius. 2014. Deriving the functional hierarchy. *Language Sciences* 46:152–174.
Reinhart, Tanya. 1997. Quantifier Scope: How Labor Is Divided between QR and Choice Functions. *Linguistics and Philosophy* 20:335–397.
Reinholtz, Charlotte. 1995. Discontinuous Constituents in Swampy Cree. In *Papers of the 26th Algonquian Conference*, ed. David H. Pentland, 394–412. Winnipeg: Univerisity of Manitoba.
Reinholtz, Charlotte. 1999. On the Characterization of Discontinuous Constituents: Evidence from Swampy Cree. *International Journal of American Linguistics* 65:201–227.
Reinholtz, Charlotte, and Kevin Russell. 1995. Quantified NPs in Pronominal Argument Languages: Evidence from Swampy Cree. In *Proceedings of NELS 25*, ed. Jill N. Beckman, volume 1, 389–403. Amherst: GLSA.
Reintges, Chris H., Philip S. LeSourd, and Sandra Chung. 2006. Movement, *Wh*-Agreement, and Apparent *Wh*-in-Situ. In *WH-Movement: Moving On*, ed. Lisa Lai-Shen Cheng and Norbert Corver, 165–194. Cambridge, MA: MIT Press.
Rett, Jessica. 2011. Exclamatives, degrees and speech acts. *Linguistics and Philosophy* 34:411–442.
Rezac, Milan. 2003. The fine structure of Cyclic Agree. *Syntax* 6:156–182.
Rezac, Milan. 2004. Elements of Cyclic Syntax: Agree and Merge. Doctoral Dissertation, University of Toronto.
Rezac, Milan. 2008. The syntax of eccentric agreement: the Person Case Constraint and absolutive displacement in Basque. *Natural Language & Linguistic Theory* 26:61–106.
Rezac, Milan. 2016. On the (un)interpretability of phi-agreement. URL https://ling.auf.net/lingbuzz/003165, manuscript, CNRS-IKER.
Rhodes, Richard A. 1976. The Morphosyntax of the Central Ojibwa Verb. Doctoral Dissertation, University of Michigan.
Rhodes, Richard A. 1990a. Obviation, Inversion, and Topic Rank in Ojibwa. In *Proceedings of the 16th Annual Meeting of the Berkeley Linguistics Society: Special Session on General Topics in American Indian Linguistics*, ed. David J. Costa, 101–115. Berkeley: Berkeley Linguistics Society.
Rhodes, Richard A. 1990b. Ojibwa secondary objects. In *Grammatical Relations: A Cross Theoret-*

ical Perspective, ed. Katarzyna Dziwirek, Patrick Farrell, and Errapel Meijas-Bikandi, 401–414. Stanford: CSLI.

Rhodes, Richard A. 1994. Agency, inversion, and thematic alignment in Ojibwe. In *Proceedings of the 20th Annual Meeting of the Berkeley Linguistics Society*, ed. Susanne Gahl, Andy Dolbey, and Christopher Johnson, 431–446. Berkeley: Berkeley Linguistics Society.

Rhodes, Richard A. 2006. *Clause Structure, Core Arguments and the Algonquian Relative Root Construction.* The Belcourt Lecture, delivered before the University of Manitoba on 20 March 1998. Winnipeg: Voices of Rupert's Land.

Rhodes, Richard A. 2010a. Missing Obliques: Some Anomalies in Ojibwe Syntax. In *Hypothesis A / Hypothesis B: Linguistic Explorations in Honor of David M. Perlmutter*, ed. Donna B. Gerdts, John C. Moore, and Maria Polinsky, number 49 in Current Studies in Linguistics, 427–455. Cambridge, MA: MIT Press.

Rhodes, Richard A. 2010b. Relative root complement: A unique grammatical relation in Algonquian syntax. In *Rara & Rarissima*, ed. Jan Wohlgemuth and Michael Cysouw, 305–324. Berlin and New York: De Gruyter Mouton.

Rhodes, Richard A. 2011. Ditransitive constructions in Ojibwe. In *Studies in Ditransitive Constructions: A Comparative Handbook*, ed. Andrej Malchukov, Martin Haspelmath, and Bernard Comrie, 626–650. Berlin and New York: De Gruyter Mouton.

Rhodes, Richard A. 2017. Obviation, inversion, and the notion of Topic in Algonquian. In *Papers of the 46th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 197–211. East Lansing: Michigan State University Press.

Riccomini, Kate. 2019. The Syntax and Semantics of the Ojibwe Verbal Domain. Doctoral Dissertation, University of Ottawa.

Richards, Norvin. 1997. What moves where when in which languages? Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Richards, Norvin. 2004. The Syntax of the Conjunct and Independent Orders in Wampanoag. *International Journal of American Linguistics* 70:327–368.

Richards, Norvin. 2012. Lardil "Case Stacking" and the Timing of Case Assignment. *Syntax* 16:42–76.

Richards, Norvin. 2017. Multiple case assignment and the English pseudo-passive. In *A Schrift to Fest Kyle Johnson*, ed. Nicholas LaCara, Keir Moulton, and Anne-Michelle Tessier, 313–319. Linguistics Open Access Publications.

Ritter, Elizabeth, and Sara Thomas Rosen. 2010. Animacy in Blackfoot: Implications for Event Structure and Clause Structure. In *Lexical Semantics, Syntax, and Event Structure*, ed. Malka Rappaport Hovav, Edit Doron, and Ivy Sichel, number 27 in Oxford Studies in Theoretical Linguistics, 124–152. Oxford: Oxford University Press.

Rizzi, Luigi. 1990. *Relativized Minimality*. Cambridge, MA: MIT Press.

Rizzi, Luigi. 1997. The fine structure of the left periphery. In *Elements of Grammar: Handbook in Generative Syntax*, ed. Liliane Haegeman, 281–337. Dordrecht: Springer Netherlands.

Rogers, Jean H. 1975. Prediction of Transitive Animate Verbs in an Ojibwa Dialect. *International Journal of American Linguistics* 41:114–139.

Ross, Haj. 1967. Constraints on variables in syntax. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

Round, Erich R. 2013. *Kayardild Morphology and Syntax*. Number 1 in Oxford Studies of Endangered Languages. Oxford: Oxford University Press.

Roversi, Giovanni. 2020. How to satisfy probes: person/number hierarchy effects in Äiwoo. In *Proceedings of NELS 50*, ed. Mariam Asatryan, Yixiao Song, and Ayana Whitmal, volume 3, 99–112. Amherst, MA: GLSA.

Roversi, Giovanni. 2022. Possession and syntactic categories: An argument from Äiwoo. Manuscript, MIT.

Rudin, Catherine. 1988. On multiple questions and multiple WH fronting. *Natural Language & Linguistic Theory* 6:445–501.

Russell, Kevin. 1991. Obviation as discourse structure in a Swampy Cree *âcimowin*. In *Papers of the 22nd Algonquian Conference*, ed. William Cowan, 320–335. Ottawa: Carleton University.

Russell, Kevin. 1996. Does obviation mark point of view? In *nikotwâsik iskwâhtêm, pâskihtêpayih!: Studies in Honour of H. C. Wolfart*, ed. John D. Nichols and Arden C. Ogg, 367–382. Winnipeg: Algonquian and Iroquoian Linguistics.

Russell, Kevin, and Charlotte Reinholtz. 1996. Hierarchical Structure in a Non-Configurational Language: Asymmetries in Swampy Cree. In *Proceedings of the 14th West Coast Conference on Formal Linguistics*, ed. José Camacho, Lina Choueiri, and Maki Watanabe, 431–445. Pasadena: University of Southern California.

Russell, Lena, and Inge Genee. 2014. *Ákaitsinikssiistsi: Blackfoot Stories of Old*. Regina: University of Regina Press.

Russell, Lena, Inge Genee, Eva van Lier, and Fernando Zúñiga. 2012. Referential Hierarchies in Three-Participant Constructions in Blackfoot: The Effects of Animacy, Person, and Specificity. *Linguistic Diversity* 10:55–79.

Sag, Ivan. 1976. Deletion and Logical Form. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

San Roque, Lila, Simeon Floyd, and Elisabeth Norcliffe. 2018. Egophoricity: An introduction. In *Egophoricity*, ed. Simeon Floyd, Elisabeth Norcliffe, and Lila San Roque, 1–78. Amsterdam: John Benjamins.

Scheffler, Tatjana. 2008. Semantic operators in different dimensions. Doctoral Dissertation, University of Pennsylvania.

Schmerling, Susan F. 1975. Asymmetric Conjunction and Rules of Conversation. In *Speech Acts*, ed. Peter Cole and Jerry L. Morgan, number 3 in Syntax and Semantics, 211–231. New York: Academic Press.

Schmirler, Katherine, Atticus G. Harrigan, Antti Arppe, and Arok Wolvengrey. 2019. Plains Cree Verbal Derivational Morphology: A Corpus Investigation. In *Papers of the 48th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 239–254. East Lansing: Michigan State University Press.

Schwarz, Florian. 2009. Two types of definites in natural language. Doctoral Dissertation, University of Massachusetts Amherst, Amherst.

Schwarzschild, Roger. 2002. Singleton Indefinites. *Journal of Semantics* 19:289–314.

Schütze, Carson T. 2001. On Korean "Case Stacking": The varied functions of the particles *ka* and *lul*. *The Linguistic Review* 18:193–232.

Scott, Tessa. 2021. Formalizing two types of mixed A/Ā movement. Manuscript, UC Berkeley.

Seiter, William. 1980. *Studies in Niuean syntax*. New York: Garland Publishing.

Sells, Peter. 2001. *Structure, Alignment and Optimality in Swedish*. Stanford: CSLI Publications.

Sheehan, Michelle. 2020. The Romance Person Case Constraint is not about clitic clusters. In *Dative constructions in Romance and beyond*, ed. Anna Pineda and Jaume Mateu, number 7 in

Open Generative Syntax, 143–171. Berlin: Language Science Press.
Sherwood, David Fairchild. 1983. Maliseet-Passamaquoddy Verb Morphology. Doctoral Dissertation, Yale University.
Sherwood, David Fairchild. 1986. *Maliseet-Passamaquoddy Verb Morphology*. Ottawa: University of Ottawa Press.
Simeonova, Vesela, and Gita Zareikar. 2015. The Syntax of Evidentials in Azeri, Bulgarian, and Persion. In *Proceedings of the 2015 Annual Conference of the Canadian Linguistic Association*, ed. Santa Vīnerte.
Singerman, Adam Roth. 2018. The morphosyntax of Tuparí a Tupían language of the Brazilian Amazon. Doctoral Dissertation, University of Chicago.
Slavin, Tanya. 2012a. Phonological and Syntactic Evidence for Stem Structure in Oji-Cree. *International Journal of American Linguistics* 78:497–532.
Slavin, Tanya. 2012b. The syntax and semantics of stem composition in Ojicree. Doctoral Dissertation, University of Toronto.
Slavin, Tanya. 2015. Possessive Noun Incorporation in Oji-Cree. *International Journal of American Linguistics* 81:379–408.
Slavin, Tanya. 2017. Verb stem formation and event composition in Oji-Cree. In *The Structure of Words at the Interfaces*, ed. Heather Newell, Máire Noonan, Glyne Piggott, and Lisa deMena Travis, number 68 in Oxford Studies in Theoretical Linguistics, 261–296. Oxford: Oxford University Press.
Smith, Nicholas N. 1977. The Changing Role of the Wabanki Chief and Shaman. In *Actes du 8e Congrès des Algonquinistes*, ed. William Cowan, 213–221. Ottawa: Carleton University.
Smith, Nicholas N., and Willard Walker. 1997. The Changing Role of Shamans and Their Magic in the Validation and Maintenance of Wabanaki Culture. In *Papers of the 28th Algonquian Conference*, ed. David H. Pentland, 365–371. Winnipeg: Univerisity of Manitoba.
Speas, Peggy. 2004. Evidentiality, logophoricity and the syntactic representation of pragmatic features. *Lingua* 114:255–276.
Speas, Peggy. 2008. On the Syntax and Semantics of Evidentials. *Language and Linguistics Compass* 2:940–965.
Starks, Donna. 1995. Subordinate Clauses in Woods Cree. *International Journal of American Linguistics* 61:312–327.
Stassen, Leon. 1985. *Comparison and Universal Grammar*. Oxford: Blackwell.
von Stechow, Arnim. 1984. Comparing semantic theories of comparison. *Journal of Semantics* 3:1–77.
Stepanov, Arthur. 1998. On *wh*-fronting in Russian. In *Proceedings of NELS 28*, ed. Pius N. Tamanji and Kiyomi Kusumoto, 453–467. Amherst, MA: GLSA.
Storto, Luciana R. 1999. Aspects of Karitiana Grammar. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Sullivan, Michael D. 2020. *Relativization in Ojibwe*. Lincoln: University of Nebraska Press.
Sumbatova, Nina R. 2011. Person hierarchies and the problem of person marker origin in Dargwa. In *Tense, aspect, modality and finiteness in East Caucasian languages*, ed. Gilles Authier and Timur Maisak, number 30 in Diversitas Linguarum, 131–160. Bochum: Brockmeyer.
Sumbatova, Nina R., and Yury A. Lander. 2014. *Даргинский говор селения Танты: грамматический очерк, вопросы синтаксиса [The Dargwa dialect of the village of Tanty: grammatical sketch, questions of syntax]*. Moscow: Языки славянской культуры [Languages

of Slavic Culture].
Sylliboy, Barbara, Elizabeth Paul, Serge Paul, Arlene Stevens, and Dianne Friesen. 2019. The Light Verb *-eke* in Mi'kmaq. In *Papers of the 48th Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 255–274. East Lansing: Michigan State University Press.
Sylliboy, Barbara, Arlene Stevens, Yvonne Denny, and Dianne Friesen. 2023. Unaccusative and Unergative Root Classes in Mi'kmaw. In *Papers of the 52nd Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 303–318. East Lansing: Michigan State University Press.
Szabó, László. 1972a. Malecite Prosodics. In *Proceedings of the 7th International Congress of Phonetic Sciences*, ed. André Rigault and René Charbonneau, 1032–1034. The Hague and Paris: Mouton.
Szabó, László. 1972b. Stress and Vowel Length in Malecite. *Proceedings of the American Philosophical Society* 116:338–342.
Szabó, László. 1979. Vowel Length in Micmac and Malecite. In *Current Issues in the Phonetic Sciences: Proceedings of the IPS-77 Congress, Miami Beach, Florida, 17–18 December 1977*, ed. Harry Hollien and Patricia Hollien, number 9 in Current Issues in Linguistic Theory, 583–587. Amsterdam and Philadelphia: John Benjamins.
Teeter, Karl V. 1971. The Main Features of Malecite-Passamaquoddy Grammar. In *Studies in American Indian Languages*, ed. Jesse Sawyer, number 65 in University of California Publications in Linguistics, 191–249. Berkeley: University of California Press.
Teeter, Karl V., and Philip S. LeSourd. 1983. Vowel Length in Malecite. In *Actes du 14e Congrès des Algonquinistes*, ed. William Cowan, 245–248. Ottawa: Carleton University.
Teeter, Karl V., and Philip S. LeSourd. 2007. *Tales from Maliseet Country: The Maliseet Texts of Karl V. Teeter*. Lincoln: University of Nebraska Press.
Thivierge, Sigwan. 2016. Failure to agree in Nishnaabemwin inverse-marking. Master's thesis, Concordia University.
Thivierge, Sigwan. 2017. Deriving Inverse-marking Pattern in Nishnaabemwin. In *Proceedings of the 34th West Coast Conference on Formal Linguistics*, ed. Aaron Kaplan, Abby Kaplan, Miranda K. McCarvel, and Edward J. Rubin, 544–553. Somerville, MA: Cascadilla Proceedings Project.
Thomason, Lucy. 1995. The Assignment of Proximate and Obviative in Informal Fox Narrative. In *Papers of the 26th Algonquian Conference*, ed. David H. Pentland, 462–496. Winnipeg: Univerisity of Manitoba.
Thomason, Lucy. 2003. The Proximate and Obviative Contrast in Meskwaki. Doctoral Dissertation, University of Texas at Austin.
Thompson, Chad. 1994. Passives and inverse constructions. In *Voice and Inversion*, ed. Talmy Givón, number 28 in Typological Studies in Language, 47–63. Amsterdam and Philadelphia: John Benjamins.
Thráinsson, Höskuldur. 2001. Object shift and scrambling. In *The Handbook of Contemporary Syntactic Theory*, ed. Mark Baltin and Chris Collins, 148–202. Oxford: Blackwell.
Tilleson, Paul. 2019. On Bipartite Negation. Doctoral Dissertation, University of Minnesota.
Trommer, Jochen. 2006. Direction marking and case in Menominee. In *Case, Valency, and Transitivity*, ed. Leonid Kulikov, Andrej Malchukov, and Peter de Swart, number 77 in Studies in Language Companion Series, 91–111. Amsterdam: John Benjamins.
Trommer, Jochen. 2008. Third-Person Marking in Menominee. In *Phi Theory: Phi-Features Across Modules and Interfaces*, ed. Daniel Harbour, David Adger, and Susana Béjar, number 16 in Ox-

ford Studies in Theoretical Linguistics, 221–250. Oxford: Oxford University Press.

Tsilia, Anastasia. 2023. Proleptic constructions in Modern Greek. *Proceedings of Sinn Und Bedeutung* 27.

Txurruka, Isabel Gómez. 2003. The Natural Language Conjunction *and*. *Linguistics and Philosophy* 26:255–285.

Ura, Hiroyuki. 1996. Multiple feature-checking: A theory of grammatical function splitting. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.

van Urk, Coppe. 2015. A uniform syntax for phrasal movement: A case study of Dinka Bor. PhD Thesis, MIT.

van Urk, Coppe. 2020. Successive Cyclicity and the Syntax of Long-Distance Dependencies. *Annual Review of Linguistics* 6:111–130.

van Urk, Coppe, and Norvin Richards. 2015. Two Components of Long-Distance Extraction: Successive Cyclicity in Dinka. *Linguistic Inquiry* 46:113–155.

Valentine, J. Randolph. 1994. Ojibwe dialect relationships. Doctoral Dissertation, University of Texas at Austin.

Valentine, J. Randolph. 2001. *Nishnaabemwin Reference Grammar*. Toronto: University of Toronto Press.

Valentine, J. Randolph. 2005. Prescription and Proscription in Ojibwe Animal-Marriage Tales. In *Papers of the 36th Algonquian Conference*, ed. H. C. Wolfart, 449–471. Winnipeg: Univerisity of Manitoba.

Verbeke, Saartje. 2013. *Alignment and Ergativity in New Indo-Aryan Languages*. Number 51 in Empirical Approaches to Language Typology. Berlin: De Gruyter Mouton.

Vikner, Sten. 2017. Object Shift in Scandinavian. In *The Wiley Blackwell Companion to Syntax*, ed. Martin Everaert and Henk C. van Riemsdijk. Hoboken, NJ: John Wiley & Sons, second edition.

Vinokurova, Nadya. 2005. Lexical categories and argument structure: A study with reference to Sakha. Doctoral Dissertation, Utrecht University, Utrecht.

van der Wal, Jenneke. 2017. Flexibility in symmetry: An implicational relation in Bantu double object constructions. In *Order and structure in syntax II: Subjecthood and argument structure*, ed. Michelle Sheehan and Laura R. Bailey, number 2 in Open Generative Syntax, 115–152. Berlin: Language Science Press.

van der Wal, Jenneke. 2022. *A Featural Typology of Bantu Agreement*. Number 6 in Rethinking Comparative Syntax. Oxford: Oxford University Press.

Walkow, Martin. 2012. Goals, Big and Small. Doctoral Dissertation, University of Massachusetts Amherst, Amherst.

Walkow, Martin. 2013. Locating variation in person restrictions. *University of Pennsylvania Working Papers in Linguistics* 19:247–256.

Wallis, Wilson D., and Ruth Sawtell Wallis. 1957. *The Malecite Indians of New Brunswick*. Number 148 in National Museum of Canada Bulletin. Ottawa: National Museum of Canada.

Weggelaar, C. 1974. The Algonquian Verb: Another Reconsideration. *International Journal of American Linguistics* 40:249–253.

Whalen, D. H., Bryan Gick, and Philip S. LeSourd. 1999. Intrinsic F0 in Passamaquoddy Vowels. In *Papers of the 30th Algonquian Conference*, ed. David H. Pentland, 417–428. Winnipeg: University of Manitoba.

Wherry, Leah. 2007. Wabanaki Women Religious Practitioners. Master's thesis, University of New Brunswick.

Wilson, Brianna, and Andrew Murphy. 2022. Discontinuous Noun Phrases and Irrealis Movement in Iquito. Manuscript, University of Chicago.

Wiltschko, Martina, Valerie Marshall, Andy Matheson, and Audra Vincent. 2015. Independent Pronouns in Blackfoot. In *Papers of the 43rd Algonquian Conference*, ed. Monica Macaulay and J. Randolph Valentine, 266–286. Albany: SUNY Press.

Witzlack-Makarevich, Alena, Taras Zakharko, Lennart Bierkandt, Fernando Zúñiga, and Balthasar Bickel. 2016. Decomposing hierarchical alignment: co-arguments as conditions on alignment and the limits of referential hierarchies as explanations in verb agreement. *Linguistics* 54:531–561.

Wolfart, H. C. 1973. Plains Cree: A grammatical study. *Transactions of the American Philosophical Society* 63:1–90.

Wolfart, H. C. 1978. How Many Obviatives: Sense and Refernce in a Cree Verb Paradigm. In *Linguistic Studies of Native Canada*, ed. Eung-Do Cook and Jonathan Kaye, 255–272. Vancouver, BC: UBC Press.

Wolvengrey, Arok. 2011. Semantic and pragmatic functions in Plains Cree syntax. Doctoral Dissertation, University of Amsterdam.

Wood, Jim, and Raffaella Zanuttini. 2023. The Syntax of English Presentatives. To appear in *Language*.

Woolford, Ellen. 1993. Symmetric and Asymmetric Passives. *Natural Language & Linguistic Theory* 11:679–728.

Woolford, Ellen. 1995. Object Agreement in Palauan: Specificity, Humanness, Economy and Optimality. In *Papers in Optimality Theory*, ed. Jill N. Beckman, Laura Walsh Dickey, and Suzanne Urbanczyk, number 18 in University of Massachusetts Occasional Papers, 665–700. Amherst, MA: GLSA.

Woolford, Ellen. 1999. Animacy hierarchy effects on object agreement. In *New Dimensions in African Linguistics and Languages*, ed. Paul Kotey, number 3 in Trends in African Linguistics, 203–216. Trenton, NJ: Africa World Press.

Woolford, Ellen. 2016. Two types of portmanteau agreement: Syntactic and morphological. In *Optimality-theoretic syntax, semantics, and pragmatics: From uni- to bidirectional optimization*, ed. Géraldine Legendre, Michael T. Putnam, Henriëtte de Swart, and Erin Zaroukian, 111–135. Oxford: Oxford University Press.

Woolford, Ellen. 2017. Mainland Scandinavian object shift and the puzzling ergative pattern in Aleut. In *Order and structure in syntax*, ed. Laura Bailey and Michelle Sheehan. Berlin: Language Science Press.

Wunderlich, Dieter. 2005. The Challenge by Inverse Morphology. *Lingue e linguaggio* 4:195–214.

Wurmbrand, Susi. 2019. Cross-clausal A-dependencies. In *Proceedings of the Fifty-Fourth Annual Meeting of the Chicago Linguistic Society*, ed. Eszter Ronai, Laura Stigliano, and Yenan Sun, 585–604. Chicago: Chicago Linguistic Society.

Wurmbrand, Susi, and Magdalena Lohninger. 2023. An Implicational Universal in Complementation—Theoretical Insights and Empirical Progress. In *Propositional Arguments in Cross-Linguistic Research: Theoretical and Empirical Issues*, ed. Jutta M. Hartmann and Angelika Wöllstein, 183–229. Tübingen: Narr Verlag.

Xu, Yadong. 2021. Differential subject marking also depends on syntactic height: Evidence from Delaware. In *Proceedings of the 38th West Coast Conference on Formal Linguistics*, ed. Rachel Soo, Una Y. Chow, and Sander Nederveen, 472–482. Somerville, MA: Cascadilla Proceedings

Project.
Xu, Yadong. 2022. How Far Can a Probe Agree: Microvariation in Algonquian Peripheral Agreement. Doctoral Dissertation, University of Manitoba.
Xu, Yadong. 2023. A Survey of the Patterning of Peripheral Agreement. In *Papers of the 52nd Algonquian Conference*, ed. Monica Macaulay and Margaret Noodin, 379–400. East Lansing: Michigan State University Press.
Yip, Moira, Joan Maling, and Ray Jackendoff. 1987. Case in Tiers. *Language* 63:217–250.
Yoon, James H. 2004. Non-nominative (major) subjects and case stacking in Korean. In *Non-nominative Subjects*, ed. Peri Bhaskararao and Karumuri V. Subbarao, volume 2, 265–314. Amsterdam: John Benjamins.
Yuan, Michelle. 2018. Dimensions of Ergativity in Inuit: Theory and Microvariation. Doctoral Dissertation, Massachusetts Institute of Technology, Cambridge, MA.
Yuan, Michelle. 2021. Diagnosing Object Agreement vs. Clitic Doubling: An Inuit Case Study. *Linguistic Inquiry* 52:153–179.
Yuan, Michelle. 2022. Ergativity and object movement across Inuit. *Language* 98:510–551.
Zanuttini, Raffaella. 2017. Presentatives and the syntactic encoding of contextual information. In *Elements of Comparative Syntax: Theory and Description*, ed. Enoch O. Aboh, Eric Haeberli, Genoveva Puskás, and Manuela Schönenberger, number 127 in Studies in Language Companion Series, 219–255. Berlin and Boston: De Gruyter Mouton.
Zanuttini, Raffaella, and Paul Portner. 2003. Exclamative Clauses: At the Syntax-Semantics Interface. *Language* 79:39–81.
Zeevat, Henk, and Katja Jasinskaja. 2007. *And* as an additive particle. In *Language, Representation and Reasoning: Memorial Volume for Isabel Gómez Txurruka*, ed. Mixel Aurnague, Kepa Korta, and Jesús M. Larrazabal, 215–240. Bilbao: UPV-EHU.
Zyman, Erik. 2023. Raising out of Finite Clauses (Hyperraising). *Annual Review of Linguistics* 9:29–48.
Zúñiga, Fernando. 2006. *Deixis and Alignment: Inverse Systems in Indigenous Languages of the Americas.* Number 70 in Typological Studies in Language. Amsterdam and Philadelphia: John Benjamins.
Zúñiga, Fernando. 2014. Inversion, Obviation, and Animacy in Native Languages of the Americas: Elements for a Cross-linguistic Survey. *Anthropological Linguistics* 56:334–355.
Zúñiga, Fernando, and Seppo Kittilä. 2019. *Grammatical Voice.* Cambridge Textbooks in Linguistics. Cambridge: Cambridge University Press.