

Referential-Access Dependency in Penobscot

Abstract

This dissertation presents an analysis of pronominal features that eliminates the need for stipulated pronominal feature hierarchies. The main claim is that pronominal features have an internal syntax: they derive through the iteration of a simple structure, a Core contrasted with its Periphery, starting with the inherent first-iteration Core referent, Speaker (1st person). Complete interpretations of pronominal features thus derive compositionally, by reading off successive nodes of Core-Periphery structure. These iterations evolve asymmetric interpretational dependency relations, termed *referential-access dependency*, which elegantly capture not only the familiar 1 » 2 » 3 hierarchy, but also the hierarchical 3rd person split known as the Proximate-Obviative contrast, found in the Algonquian family of languages native to North America.

Drawing relevant data chiefly from Penobscot, an Eastern Algonquian language, the Core-Periphery model is shown to offer a unified account for the syntactic and discourse functions of the Proximate-Obviative contrast, and for a new observation: its interpretational and distributional constraints robustly parallel those holding over the English Independent-Dependent clause-type contrast. The Core-Periphery derivational parallel established between Proximate » Obviative and [1 2] » 3 hierarchy-rankings then explains another new observation regarding the Algonquian transitive Inverse system: use of the Inverse with configurations of 3rd person acting on 1st or 2nd person is only consistently obligatory for one morphological clause-type, the Independent. The evidence for a deep 2 » 1 hierarchy in Algonquian is reviewed and shown to be limited and contradictory, and is preliminarily linked instead to a

broader pattern of antihierarchic phenomena. Constructional sensitivity thus underlines the derivative nature of hierarchy effects.

Also revised is the standard view that Algonquian transitive verb stems agree for the grammatical gender of their object. A simpler, light-verb-based analysis is offered, giving an account for the self-contradictory traditional categories *Animate Intransitive + Object* and *Objectless Transitive Inanimate*, and showing so-called stem-agreement for grammatical animate objects to actually be a dative-accusative syncretism construction, and that for grammatical inanimate objects a type of antipassive. Both therefore simply exemplify cross-linguistically common constructions associated with their respective objects.

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1 Introduction

1.1 Introduction and layout

This work introduces an analysis that takes pronominal features to have an internal structure directly parallel to that of clausal dependency features: that is, we assert a common syntax to both.

These two phenomena do not at first seem related at all. This perception is in large part due to the vastly different syntactic scales at which the two systems operate: what similarity does the 1st person-3rd person contrast have with the contrast of Independent versus Dependent clause?

We locate the significant parallel by examining closely the properties of a third pattern: the Proximate-Obviative contrast, a morphosyntactic distinction found most clearly in the Algonquian language family indigenous to an extensive region of North America.

As a rough approximation, the Proximate-Obviative contrast is a split within 3rd person, a split that forms two distinct pronominal subtypes, Proximate 3rd person and Obviative 3rd person, each with distinct distributional constraints and interpretational outcomes.

The new observation of this work is that these constraints are formally identical to those operating over the English Independent-Dependent clause contrast. This in itself is an interesting enough observation, since heretofore, finding any kind of robust parallel to the full properties of the Proximate-Obviative contrast outside of the Algonquian family has proven to be quite difficult (see Aissen 2003, 2001, 1997 for a series of attempts).

We take this a step further, however. First we note that the Proximate-Obviative split appears to create new pronominal feature categories. That is, this split takes a pronominal feature hierarchy of a more familiar sort (1),

(1) Pronominal feature hierarchy (simplified, after Silverstein 1976)

1 » 2 » 3

and expands it into a richer set (2).

(2) Expanded pronominal feature hierarchy (after Blain 1998, inter alia)

1 » 2 » 3-Proximate » 3-Obviative

From this we extrapolate backwards: if the Proximate and Obviative function as pronominal features, but their contrast runs on the same basic system as clausal dependency, might not the more familiar pronominal categories (1st, 2nd, 3rd person) also do so?

Chapter 3 offers a defense of this claim, starting by proposing a formal means by which to build up pronominal features structurally, and so derive rather than stipulate a pronominal feature hierarchy. In doing this we eliminate the need to appeal to such hierarchies as theoretical primitives.

The particular formal algorithm is very simple one: just the restricted iteration of the topological contrast of a Core and its Periphery. We translate the iterated Core-Periphery structures built this way into the familiar terms of 1st, 2nd, and 3rd person, and then show how a further iteration gives rise to the 3rd person split that creates the Proximate-Obviative contrast. We then demonstrate that consistent interpretational and distributional constraints operate on and between elements representing each possible object produced at each cycle of derivation (e.g. each pronominal contrast): this being a direct reflection of the dependencies that arise by dint of such a derivational algorithm.

In other words, we introduce and defend a claim that pronominal features have a compositional interpretation strictly reading off of each node of their internal syntax, such that

some pronominal features, being structurally derived from others, have a natural asymmetric interpretational dependency thereon. We name this type of structural and interpretational dependency *referential-access dependency* (RAD).

The clearest example of RAD is a set of properties distinctive to the 3rd person: as a Periphery element in the Core-Periphery derivation, 3rd person "other" status is always defined as such only with respect to the prior determination of which grammatical referents are selected for Core status, that is, Speech Act Participant (SAP, i.e. 1st or 2nd person) pronominal-featural status. The crucial fact, however, is the following rather basic observation: to reach the full compositional interpretation of an expression like *her mother*, one must necessarily first access that of the intermediate referent, i.e. the 3rd person Possessor *her*.

Without this intermediate referent, the form is uninterpretable: hence in present terms, the Possessee referent *mother* in the collocation *her mother* is referential-access dependent upon the referent of the Possessor *her*. This contrasts with expressions like *my mother* and *your mother*, where the SAP Possessors are syntactically intermediate, but, as first-cycle Core elements, require no additional iteration of a Core-Periphery interpretational structure to reach the complete reference of the 3rd person Possessee. This contrast, derived directly from the Core-Periphery algorithm, captures the otherwise unexplained requirement that Possesseees must be morphosyntactically Obviative when their Possessors are 3rd persons, but not when they are SAPs.

In Chapter 4 we take this new cyclic-derivation-based model of pronominal features and their interpretations and apply it to the problem of Algonquian verbal argument-structure morphosyntax. The primary focus there is on the Inverse system---specifically, the pattern wherein SAP arguments (as against non-SAPs, i.e. 3rd persons) in certain transitive clause-types always receive the same marking, regardless of whether they are interpreted as the Agent or as the Patient.

We follow the basic claim of Bruening 2005, 2001 (with antecedents in Rhodes 1976, among others) that the Algonquian Inverse manifests a type of A-movement, one closely similar

but not identical to that of the familiar passive. We then link this to an observation never before discussed in analyses of Algonquian Inverse systems: that the Inverse is consistently required for [3[1|2]] configuration (i.e. non-SAP acting on SAP) in one particular morphological clause-type, the *Independent*, but not in other morphological clause-types, which either do not manifest this use of the Inverse at all, or vary from language to language.

We argue that this unidirectionality of variation comes from the unique status of the *Independent* morphological clause-type as a formal nominal possession construction. Here the crucial characteristic is that the hierarchically "highest" argument of an *Independent* transitive configuration manifests as morphology identical to that used for a Possessor in a nominal possession construction.

With that in mind, we note first that the Person-Case Constraint (PCC; Adger and Harbour 2004, Anagnostopoulou 2003, Boeckx 2000, Bonet 1995, 1994, 1991) against [3[1|2]] configurations in verbal double-object constructions extends in Algonquian to a ban on [Obv [Prox]] configurations in the same context. Then, we note for nominal possession constructions a parallel ban on Proximate Possesseees of (Obviative) 3rd person Possessors. Since the Core-Periphery analysis sets up this Proximate-Obviative contrast as the exact homolog of the SAP-non-SAP contrast, we predict that a surface [3[1|2]] configuration in the *Independent*, which would have 3rd person Possessor morphology over a complex with SAP internal arguments, would also create a PCC violation of the same kind seen for surface [Obv [Prox]] configurations in both nominal possession and verbal double object constructions. The Inverse pattern then explains as the sole means to maintain a [3[1|2]] thematic configuration without triggering a PCC violation: Inverse A-movement reshapes that structure to a surface [[1|2];[3[t_i]]] one, putting the SAP arguments topmost, where they are available to be matched by Possessor morphology. From there, since we derive rather than stipulate the pronominal feature hierarchy effects characterizing the PCC, we show that a pronominal feature hierarchy is not need to account for patterns like the Inverse (a claim also made by Bruening 2005), while

simultaneously accounting for an unexplained constraint on the distribution of the Inverse across morphological clause-types.

This is the formal side of things. All of this, however, requires a particular preliminary. The present claims have emerged out of a long-developing basic analysis of Algonquian verbal morphosyntax that is substantially different from the one standardly assumed in Algonquianist linguistics. Chapter 2 therefore first lays out this new analysis, which, I hasten to point out, is motivated (and was developed) more or less entirely independently from the claims of the subsequent chapters.

The primary difference between the proposed model and the traditional Algonquianist one is simplicity. The bulk of Chapter 2 is devoted to demonstrating a very simple light-verb-based analysis of verbal morphosyntax, which, together with an appeal to the cross-linguistically common patterns of dative-accusative syncretism and antipassivization, account for the properties of the whole system with a bare minimum of language-specific categories.

More concretely: the traditional Bloomfieldian taxonomy still standard in Algonquianist analysis identifies four fundamental types of stem-terminal verbal element, or *Final* (3a), each agreeing with their absolutive argument (i.e. the object of a transitive, or the sole argument of an intransitive); and then adds to this two "mismatch" stem types whose *Final* matches that of certain typical intransitives and transitives respectively, but nonetheless have the opposite transitivity expected from those *Finals'* categorical description (3b).

(3) Traditional Algonquianist verbal *Final*/stem categories (after Bloomfield 1946)

- a. TA transitive animate
- TI transitive inanimate
- AI animate intransitive
- II inanimate intransitive

- b. AI+O animate intransitive + object
OTI objectless transitive inanimate

In contrast, the new analysis only contrasts gender (and, limitedly, person) marking on a single, much-reduced set of stem-terminal light verbs, and derives the rest of these seemingly category-establishing effects (particularly the "mismatch" cases) from independent principles of differential object marking (Aissen 2003) and general argument structure syntax.

In short, in Chapter 2 we introduce the structures, at a coarse-grained level. In Chapter 3 we examine the pronominal features and their derivation at a fine-grained level. Then in Chapter 4 we examine the behavior of those pronominal features as configured in those structures.

Overall, then, this analysis draws on a set of three new core observations. These are listed below following the order in which they are introduced in this work.

(4) Core novel observations

- a. The morphosyntactic quirks of the overall set of transitivity-associated stems in Algonquian languages suggest that apparent stem-agreement (Finals) for the gender of the notional direct object of a transitive is not agreement, but instead reflects cross-linguistically common syntactic constructional treatments of animate and inanimate notional direct objects.
- b. The interpretational and distributional properties of the Proximate-Obviative contrast and of the English Independent-Dependent clausal dependency contrast are largely parallel.
- c. Across Algonquian languages, Inverse morphosyntax is only consistently required for a

[3[1|2]] configuration in the Independent morphological clause-type, and not in others.

In full recognition of the many flaws and weaknesses of the present particular analysis, these observations, it is hoped, will stand as useful contributions that outlast whatever changes their explanatory analysis (and indeed, the overall theoretical framework of the field as well) may undergo.

1.2 Theoretical preliminaries

The claims of this work are, at the present state of development, open to being expressed in a fairly wide range of linguistic models. For concreteness and for long-term accessibility, however, we have selected a specific set of approaches that have both descriptive adequacy and predictive power with regard to the issues addressed, and which have a substantial literature to ensure the future intelligibility of their formal presentation.

Since one of the primary claims of this work centers around the relationship between syntactic argument structure and morphological stem structure, we take as a default mapping principle Baker (1996, 1988, 1985)'s Mirror Principle (5).

(5) The Mirror Principle (Baker 1988:13)

Morphological derivations must directly reflect syntactic derivations (and vice versa).

which stipulates a direct mapping of syntax to surface morphology, all other things being equal. This we adopt on the grounds that it is the most minimal mapping principle possible, one to be assumed until contradicted with positive evidence. We therefore read the surface linearization of segmentable morphemes in Algonquian stems as---with principled exceptions---directly representing syntactic scope relations, albeit head-finally.

The overall approach to syntactic structure is, again, fairly open, but follows formally that of the Minimalist Program (Chomsky 1995) and its generativist antecedents. For the present work we require little more than a few core tools of this approach, namely, Merge (the structure-builder) and c-command (the referential-access constraint over structure). Merge is an operation taking a pair of syntactic objects (SO_i, SO_j) and replacing them with a new combined syntactic object (SO_{ij}) (Chomsky 1995:226). The particular syntactic type of this new syntactic object is inherited from one of the two Merged elements: this gives the phenomenon of headedness, represented informally in (6) by using α as the node label for an object created by Merge of two elements α and β that takes α as its head.

(6) Merge (Chomsky 1995:245:(7))

$$\begin{array}{c} \alpha_1 \\ \wedge \\ \alpha_2 \quad \beta \end{array}$$

This notion of Merge is adopted here as the minimal necessary means to create syntactic structure. The basic notion we appeal to as constraining structural access (for various operations such as binding-based interpretation and agreement) relations between elements in Merge-built structures is *c-command*, defined as in (7).

(7) C-command (Chomsky 1995:35, Reinhart 1976, inter alia)

α c-commands β if α does not dominate β and every γ that dominates α dominates β

By this definition, in the structure in (8), B c-commands nodes C, F, and G; C c-commands B, D, and E; and D and E mutually c-command, as do F and G.

(8) C-command configurations (Chomsky 1995:34-35)



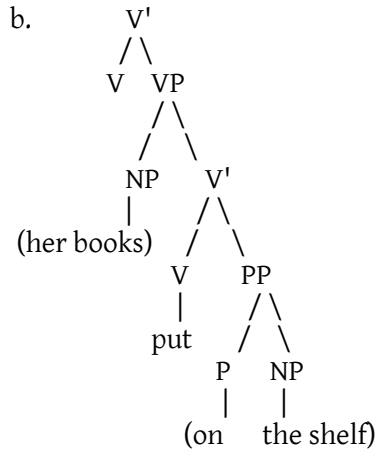
The dependency relations defined by c-command that are primarily relevant for this work are those of locality and intervention, and the descriptive observations of the Binding Conditions (Chomsky 1981). We note in passing too that we follow the copy theory of movement, i.e. the view that displacement of a constituent occurs by creating a chain of duplicates, most or all of which are deleted at the PF interface (Chomsky 1999, 1998)---though no particular evidence from the languages under consideration is offered in defence of that claim.

A more particular claim of this work is that all verbal constructions in these languages involve (a nearly always overt) light verb stacked over a rich range of relatively more lexical predicate elements. This is a specific outcome of a much broader view, that Algonquian polysynthesis, far from representing some fundamentally distinct kind of morphosyntactic system, is simply complex predication that is manifested primarily via a rich and extensive set of phonologically bound morphemes.

The analysis therefore requires a model of light verb structures. For this we follow the basic trend of work from Hale and Keyser (2002, 1998, 1997a,b,c, 1993) through Chomsky 1995 (partially) and Marantz 1997 (in particular) and Harley (especially Harley 2003a,b, along with Folli and Harley 2002). Namely, that verbal argument structure is built up in the syntax by "light" predicate heads that introduce arguments individually, with the result that these arguments have asymmetric configurational relationships relative to each other.

(9) Verbal argument structure (Hale and Keyser 1993:56:(4-5))

a. She put her books on the shelf.



In (9) the Theme NP *her books* asymmetrically c-commands the Goal argument *the shelf*: as one can see, this model is a direct descendent of the VP shell analysis for double object constructions proposed by Larson 1988; this and the closely related analysis of Applicatives by Pylkkänen 2002, 2001 (cf. also Rackowski and Richards 2005) form a core part of the discussion of Chapter 2 in particular. Note above that Hale and Keyser use fully labeled heads (V and P) for the relevant argument-introducing predicates, rather than the presently more common analysis assuming light category-labeling elements (e.g. the little *v* of Chomsky 1995 and much subsequent work), which we will follow.

Beyond this basic model of complex predication of light argument-introducing predicates, we assume, after Hirose 2003 in particular for Algonquian, and Lin 2001 for Mandarin, that stacking of light verbs is possible and indeed common. Broader questions on specific technical details of the representation of light verb phenomena are for the most part glossed over. For example, whether or not zero-derived verbs are the result of Conflation (Hale and Keyser 2002:47-103) or of more traditional movement processes is less of an issue in the languages in question, since the proposed light verbs are overt, meaning that their relationship to phonological-index movement of complements cannot be attributed to complete Conflation,

but could be accounted for by any number of formalizations capturing the observation that all the surface morphology involved is phonologically bound.

1.3 Algonquian-specific terminology

This work is specifically aimed at making some of the more striking features of Algonquian morphosyntax accessible and interesting to a general linguistic audience. Both with that end in mind, and for purely analysis-internal reasons as well, we have radically minimized the use of traditional Algonquianist-specific terms and categories.

A few, however, remain quite helpful (though this is not a claim for primitive status), and will be used extensively throughout this work. Here we offer very brief sketches to introduce the reader to the two most essential paired contrasts in this family---Proximate versus Obviative, and NA versus NI---and conclude with a short discussion of other, more minor contrasts that will be encountered.

1.3.1 Proximate and Obviative

Put simply, the Algonquian Proximate-Obviative contrast is a bifurcation of the 3rd person, one most obviously reflected as the contrast between the surface-morphologically unmarked Proximate and the overtly marked Obviative. The Proximate-Obviative contrast has discourse effects: loosely speaking, the Proximate 3rd person is the one most immediately topical or salient, with Obviatives then in a secondary status relative thereto. The contrast has syntactic constraints on its distribution as well: only one Proximate is permitted per minimal transitive-configurational domain, and Possesseees of 3rd person Possessors cannot be Proximate (and therefore must be Obviative). Much of Chapter 3 will be concerned with demonstrating that both these constraints and the discourse effects of the Proximate-Obviative contrast derive directly from its fundamentally syntactic nature.

In most Algonquian languages, only members of the NA nominal gender class (see below) have contrastive Obviative morphology, but evidence from other languages (especially Ojibwa (Rhodes 1976), and, more overtly, certain dialects of Cree) suggests that the syntactic contrast exists for NI-class referents as well, despite not being directly or overtly realized. That is, NI-class elements can be syntactically Obviative even though they have no distinctive Obviative-marking morphology. While very interesting in its own right, for the most part this asymmetry will not play a major role in the argumentation presented in this work.

1.3.2 NA and NI

Algonquian languages contrast two genders of nominal. Traditionally, these have been called "animate" and "inanimate", though it has long been observed that these are misnomers, since these language-specific gender categories do not match up with semantic animacy, a factor which has been observed to operate independently within these systems (Rhodes 1990a). Algonquianists are familiar with this mismatch, and thus usually distinguish *grammatical animacy* from *semantic animacy*, and assume the reader can tell which is meant when the term "animate" or "inanimate" is used--primarily because it is nearly always grammatical animacy that Algonquianists concern themselves with.

To help the non-Algonquianist reader, and to avoid the confusion that can arise from this traditional usage, I have in this work replaced the terms (grammatical) "animate" and (grammatical) "inanimate" with "NA" and "NI" respectively. This not only dovetails with the labels used for nominal gender in a number of contemporary Algonquian-language dictionaries, but coincidentally also happens to match the Penobscot grammatical animate and grammatical inanimate wordforms for the distal demonstrative, i.e. *na* 'that^{NA}' and *ni* 'that^{NI}'.

I have also taken advantage of the distinctiveness of the element *NA* and used to to replace the generic masculine 'he, him' traditionally used by many Algonquianists to translate

forms that can in fact generally refer to NA arguments of either sex. Correspondingly, I replace most such uses of 'it' with *NI*. This is done primarily in glosses taken from Siebert's *Penobscot Dictionary* manuscript; text translations from sources other than my own work generally keep the original English pronouns.

1.3.3 Other Algonquian-specific terms and categories

Since at least as early as Bloomfield 1946, Algonquianist linguistic analysis has employed a rather baroque set of terms covering the full range of possible combinations of transitivities and gender-matching (hence verb-stem classes like *Transitive Animate* and *Inanimate Intransitive*), as well as a detailed set of labels for the myriad analyzable parts of the (descriptively) polysynthetic stem. A chief aim of this work is to do away with any need to appeal to these categories as primitives, and instead to present the phenomena they represent in much more generalist terms without sacrificing the same degree of descriptive precision and accuracy they reflect, and perhaps even to improve thereon. For this reason, we will only introduce terms from the full Bloomfieldian terminological set where necessary for the overall exposition.

Beyond this, there is only one categorical distinction that the reader may encounter in the glosses that may require some brief explanation: the *absentative*. Absentative marking indicates that a nominal referent is in some discursively relevant sense inaccessible or no longer accessible or present (or, colloquially but more precisely, "been and gone"). Hence it is most often encountered with reference to deceased individuals or lost possessions.

The absentative appears in the data cited here chiefly in the form of the NI absentative ending (-e), which I analyze to act also as the marker distinguishing an *if*-clause from a *when*-clause. This is a controversial view, and needless to say, a story unto itself. This and other features of absentativity are not directly relevant to any claim made in this work, and so will not be mentioned further.

1.4 Stylistic use of pronouns

In the body of this presentation I use the pronoun "I" rather sparingly, and primarily to indicate instances where I lack necessary knowledge. The first person plural "we" is used---as befits a student based in Algonquian, Austronesian, and Somali---with an inclusive reading: in other words, as an invitation to you the reader to join me on this narrative excursion.

1.5 Sources, citation conventions, and problems

The data examined in this work comes from Penobscot, an Eastern Algonquian language indigenous to the Penobscot River valley in central Maine, U.S.A. While Penobscot is relatively richly documented with regard to textual corpora and lexicography, it is no longer possible to carry out most kinds of syntactic testing with Penobscot. Much reference will therefore be made to Passamaquoddy-Maliseet, a neighboring Eastern Algonquian language with which it shares nearly identical morphosyntactic properties (to the extent to which these can be compared), but which has seen significant analysis in the generativist framework.

The main sources of Penobscot data are unpublished. First and foremost are the field notes and manuscripts of Frank T. Siebert, Jr., presently housed at the archives of the American Philosophical Society (APS) in Philadelphia, Pennsylvania. Also preserved there is the bulk of Frank G. Speck's unpublished field notes on Penobscot and related languages, though here a major published source is Speck 1918, which I have retranscribed in full according to Siebert's basic phonemic analysis. In this work I have cited these retranscriptions only, since Speck's original materials come in the form of a diacritic-laden, narrow phonetic transcription that does not lend itself to facile morphological analysis by the nonspecialist reader.

The major sources of data used here are Siebert's *Penobscot Dictionary* manuscript and two-volume bilingual *Penobscot Legends* manuscript. Both works are rather in flux still today, and so citation from these two materials is marked in a relative rather than absolute form. That

is, Penobscot forms with no citation information are headwords (and/or their obvious derivants) from the circa 1996 manuscript draft of the *Penobscot Dictionary*, since they can be located better therein through dictionary alphabetical order than through the somewhat erratic page numbering. For the same reason, forms from that manuscript but not given in alphabetical order are cited as *PD: page number*. By the same token, material quoted from the 1998 manuscript draft of the *Penobscot Legends* texts are cited by the Penobscot-language title of text and paragraph number.

Material from Siebert's field notebooks (also at the APS) are cited in the form *S:number*, where the numbering follows that found on the set of labels attached to the individual notebooks during a 1998 cataloging effort prior to transfer to the APS.

The remaining sources of material cited are all produced directly from the hand or voice of native speakers. A major resource is the set of "Master Card" recordings made by Susan Dana in the mid-1970s at the Indian Island School, Indian Island, Maine. These recordings have since been transferred to tape and then digitized as WAV files. The complete documentation consists of over a thousand recordings of individual words or phrases, accompanied by a typewritten list of numbered glosses, most evidently being elicitation prompts, but some likely also volunteered by Dana during the production of this material. Penobscot forms cited from this source are from my own transcriptions of the sound recordings, and have the source abbreviation *SDMC*.

My transcription and translation of a short recording of Siebert eliciting Penobscot sentences with native speaker Andrew Dana has also been used; this is cited as *ADElicitations*.

A set of five untranscribed and untranslated Penobscot texts (along with several songs) performed by Arthur Neptune (again likely in the mid-1970s, recorder unknown), also archived at the APS, is cited as *ANTexts*, with accompanying text number. These too are provided here in the form of my own transcription and translation.

One final source is a letter written by Joseph Polis (famous as the guide who took Thoreau through *The Maine Woods*), presently part of the Joseph Polis-Passamaquoddy Papers

collection at the Huntington Free Library, Bronx, New York. My particular copy is a photocopy provided as part of a handout from a presentation by Pauleena MacDougall at the 32nd Algonquian Conference (Montréal, October 2000). This is cited as *PolisLetter*.

Penobscot, like its nearby relative Passamaquoddy-Maliseet, makes some substantial use of contrastive pitch-accent. Only Siebert's materials consistently reflect a consistent attention to this fact, and so accent is marked on material from Siebert, since it forms a core part of his original documentation. For most other sources, accentuation is either uncertain, unreliably recorded, or not recorded at all. For this reason, material cited from non-Siebert sources, i.e. mainly rephonemicized or newly transcribed forms, are given without accentuation marking, except where predicted to be required for a morphological contrast.

1.6 Orthography and phonology

I refer the reader to Siebert 1988 for a thorough description of Penobscot phonology and orthographic conventions. For present purposes, it suffices to note that an acute accent (*á*) indicates a high pitch-accent, and a grave one a low (*à*), and that <*α*> indicates approximately IPA [ɤ]. All other symbols follow standard Americanist-usage IPA values.

1.7 Abbreviations

1.7.1 Abbreviations used by the author

1	1st person (if not otherwise specified, indicates Possessor morphology)
2	2nd person
3	3rd person
1pli	first person plural inclusive
1ple	first person plural exclusive

NA	NA gender class ("animate"); (in glosses) pronominal gloss for same
NI	NI gender class ("inanimate"); (in glosses) pronominal gloss for same
s, sg	singular (usually not marked)
pl	plural
Prox, prox	Proximate
Obv, obv	Obviative
abs	absentative
Imps	Impersonal (pronominal feature)
HumPat	(unspecified) human Patient
GenInstr	general (unspecified) instrument
ExtPl	Extended Plural (similar to a pluractional or a collective/distributive)
T	T-element (see Chapter 2)
RP	Relational Predicate (see Chapter 2)
LN	light noun
LV	light verb LV ^{NA} = light verb taking NA-class argument LV ^{NI} = light verb taking NI-class argument
mdrflx.LV	medioreflexive ("mediopassive") light verb
rcp.LV	reciprocal light verb
rflx.LV	reflexive light verb
DIR	Direct light verb
INV	Inverse light verb
Idp	Independent morphological clause-type
Idc	Indicative (subtype of Independent)
Subord	Subordinative (subtype of Independent)
Cj	Conjunct morphological clause-type
Impr	Imperative morphological clause-type

Possr	Possessor
P	P-ending (clause-type marker)
W	W-ending (clause-type marker)
N	N-ending (clause-type marker)
NEG	negative concord marker
AFF	affective (augmentative or diminutive)
DIM	diminutive
IWI	adverbializing element
VAR	variable
PERF	perfective aspect
=FOC	focusing enclitic
=INT	intensivizing enclitic
=FUT	future enclitic
=POT	potential enclitic
=UCT	uncertainty-marking evidential enclitic
=QT	quotative/secondhand information evidential enclitic
TA	transitive animate (verbal Final class)
TI	transitive inanimate (verbal Final class)
AI	animate intransitive (verbal Final class)
II	inanimate intransitive (verbal Final class)
AI+O	animate intransitive taking an object (verbal stem class)
OTI	transitive inanimate taking no object (verbal stem class)

1.7.2 Abbreviations used in works cited

Anagnostopoulou 2003

Cl-2DAT 2nd person dative clitic

3-ACC{Acc/-animate} 3rd person non-animate accusative

Cl-3ACC{Dat/+animate} 3rd person animate dative clitic

Baker 1988 (and citations therewithin)

ABS	absolute
APASS	antipassive
DIR	directional
DS	directional suffix
INDIC	indicative
PL	plural
REC	recent past
1SA	1st person singular absolute
3SA	3rd person singular absolute
3SE	3rd person singular ergative
3SS	3rd person singular subject

Bittner 1987

A	absolute
ap	antipassive
E	ergative
INS	instrumental
intr.indic, tr.indic	intransitive, transitive indicative
3sgA	3rd person singular absolute
3sgE	3rd person singular ergative

Brittain 2001a,b (including citation from Blain 1997)

Comp	complementizer
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CIN	conjunct indicative neutral
dir	Direct element
O	object agreement
obv	obviative, nominal suffix
poss	possessive
Past	past tense marker
REL	relative clause marker
S	subject agreement
3	3rd person (animate)
4	obviative, verbal suffix
Bruening 2005, 2001	(usage which differs from mine only in capitalization is omitted)
Conj	Conjunct inflection
Emph	emphatic particle
Fut	future
IC	initial change (= my C)
Perf	preverb with a past or perfective interpretation
Poss	possessed theme
Part	participle agreement
TAN	quantifier over certain verbal elements, appears in wh-questions, free relatives
Chung 1998	
agr	subject-verb agreement in finite clauses or Possessor agreement
AP	antipassive
Comp	complementizer
Fut	future

L	linker
Loc	local morphological case
Obl	oblique morphological case
Pass	passive
Pl	plural
Prog	progressive

Jaisser 1995

perf	perfective
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Mohanan 1994

CAUS	causative
D	dative case
E	ergative case
IMPERF	imperfective
N	nominative case
NF	non-finite
PERF	perfective
PR	present

Rhodes 2002, 1991, 1976

BEN	benefactive
OAI	object agreement I
PAST	past
TSA	transitive stem agreement
1SUBJ	1st person subject
3AN OBJ	3rd person animate object

3POSS

3rd person Possessor

2 **Transitivity in Algonquian Argument Configuration Morphosyntax: Light Verbs, Dative-Accusative Syncretism, Relational Predicates, and Antipassivization**

2.1 Introduction

2.1.1 Overview

In order to understand the configurational behavior of pronominal features in Algonquian languages, we need a model of the morphosyntax of Algonquian transitive argument structure. This is the goal of this chapter.

The standard Algonquianist model of transitive morphosyntax has remained essentially unchanged since Bloomfield 1946 introduced a fundamentally descriptive set of categories and terms. The analysis informing these traditional categories is problematic for a number of distinct reasons. In this chapter we offer an alternative approach, one that accounts for the observed properties of Algonquian transitivity in a more concise and less language-family-specific way, while simultaneously doing away with a number of longstanding problems introduced by the traditional analysis.

The specific new claim of this chapter is this: contrary to standard Algonquianist analysis, the view that the terminal element of categorically transitive stems (the *Final*) agrees for the gender of the internal argument is unnecessary and untenable. What looks like agreement for the [+animate] or [-animate] (in present terms, [\pm NA]) feature of the notional direct object argument---giving rise to contrast between Transitive Animate (TA) and Transitive Inanimate (TI) stems---is better identified as two respective feature-driven syntactic constructions, both of a much more cross-linguistically motivated kind: dative-accusative syncretism, in the first case, and antipassivization, in the second.

This view of the system has not been immediately obvious because the two patterns manifest in Algonquian languages through a head-marking morphosyntax, rather than through

the primarily dependent-marking strategies by which both are better known. The overall contribution of this new analysis is twofold: a de-exoticization of the Algonquian transitive system within the context of cross-linguistic comparison, and a removal of several problems of overgeneration and underprediction in the traditional account.

2.1.2 Layout

In §2.2.1 we introduce and motivate our basic model of the morphosyntax of Algonquian verbal argument-configurational structure. This consists of the claim that all verbal collocations, both intransitive and transitive alike, derive via a simple stacking of a light verb over the remainder of the verbal complex predication, with only the light verb exhibiting agreement-like properties.

Observing that the collocation of the light verb with its immediate complement head has special properties, we give this collocation a special descriptive label: *affixal verb*. In §2.2.2, we compare this affixal verb model with the standard Algonquianist analysis. We show the latter to be insufficiently constrained, predicting patterns which do not exist, and also empirically inadequate, in that it requires its own categorical terms to be used in self-contradictory ways. The affixal verb model, being based in a much more constrained set of categories, does not overgenerate in this way; the patterns identified by the traditional model must therefore be accounted for independently.

The effort to do so constitutes the two main claims of the chapter: in §2.3, that apparent transitive stem-agreement for [+animate] (= [+NA]) notional direct objects is actually a manifestation of head-marking dative-accusative syncretism; and in §2.4, that apparent transitive stem-agreement for [-animate] (= [-NA]) notional direct objects actually reflects an antipassive structure.

More narrowly, in §2.3.1 we give an overview of dative-accusative syncretism, focusing on its association with [+animate] notional direct objects. From there we examine three

distinctive properties of dative-accusative syncretism: that it is a general outcome with an [+animate] notional direct object (§2.3.3), but is neutralized to treatment similar to that of [-animate]s in cases where the notional direct object is purely property-denoting (§2.3.3) or embedded in a double object configuration (§2.3.4). For each of these three points we demonstrate that the Algonquian use or non-use of the apparent stem-agreement construction with a [+NA] notional direct object tracks these properties exactly, suggesting that it too is a DAS construction.

In §2.3.5 we lay out how DAS syntax is predicted to manifest in a heavily head-marking language such as Penobscot: namely, via a set of bound elements on the verbal complex that act as an equivalent to a DAS-satisfying adposition or case-marker by introducing a [+NA] notional direct object in a structurally high position, i.e. immediately below the light verb. We reanalyze what has been called stem-agreement morphology for a [+NA] notional direct object as these very elements, which we term *Relational Predicates*. In §2.3.6-7 we support this analysis first with two points of morphosyntactic evidence that the Relational Predicate and its associated [+NA] notional direct object are syntactically high relative to other elements in the configuration (§2.3.6). Finally, in §2.3.7 we show that the interpretational contribution of Relational Predicates matches that of established high argument-introducing predicates such as Applicatives and causatives: they are specifically structurally high transitivizers, rather than simply just gender-agreeing transitivizers.

§2.3.8 gives a summary and transition to §2.4, where we turn our attention to the other outcome of the DAS-based model of TAs: that TIs, the alleged stem-agreement equivalents of TAs, are in fact antipassive constructions. This discussion begins in §2.4.1 by laying out the two predictions of the DAS model: that TI constructions, not being constrained by DAS requirements, take the minimal form of an Algonquian verb---a light verb stacked over a complex predication that does not introduce an internal argument---with the consequence that TIs have basically intransitive LV syntax, and can only introduce a notional direct object via an oblique.

The remainder of the second half of the chapter concerns itself with demonstrating that these two properties, which are the chief characteristics of antipassives, are indeed also properties of TI constructions. In §2.4.2-5 the syntactically oblique status of the TI notional direct object is established. This is based on the observation that this kind of argument is indexed on the verbal complex with *N-Peripheral Marking* (§2.4.2), a morphology identical to that of *Secondary Objects*, which are examined in detail in §2.4.3, and shown to have properties indicative of an Instrumental, being particularly similar to the Instrumental *with* of English thematic transferees. At the same time, a "passivization" test ostensibly distinguishing *Secondary Objects* from TI notional direct objects is shown to have less utility than originally thought (though ultimately relatable to the Instrumental characterization), suggesting that *N-Peripheral Marking* may at least be a sort of default morphology that includes Instrumentals. A set of strong parallels holding between the uses of *N-Peripheral Marking* and the uses of the Chamorro Oblique, examined in §2.4.4, then further strengthen the claim that this marking for the TI notional direct object stems from an antipassive syntax. This is rounded out in §2.4.5 with internal reconstruction evidence for an Instrumental status for this morphology's distinctive N-element, this being suggested to have derived from a still-extant affixal verb meaning 'hold(ing)' or 'act on by hand', a cross-linguistically common derivation for Instrumental elements.

In §2.4.6-8 we then show precisely how the TI stem-collocation itself has the core features of an antipassivized verb, in being an unergative intransitive construction derived via the minimal structure of light verb stacked over lexical material. The first result of this view is that it leaves much more room for TIs to exhibit variation in derivation than for their ersatz agreement-equivalents, TAs. This is demonstrated first in §2.4.6, where the three distinct possible TI patterns are contrasted with the single derivational pattern available to TAs. In §2.4.7 the lexical diversity reported for antipassive-deriving elements is found to be reflected in an equivalent lexical diversity of the LVs deriving TI constructions, one again not paralleled in TAs. Lastly, in §2.4.8, the ability of antipassives to drop their notional direct objects is observed

for TI constructions (and, as predicted, not for TAs), and thus shown to account for the problematic Objectless Transitive Inanimate category required by the traditional analysis.

Finally, in §2.5, we present a small but striking contrast: the asymmetry of interpretation of otherwise identically inflected TA and TI constructions. The readings of each are shown to derive directly from the respective claims proposed for each's syntactic structure (DAS structure for TA, antipassive for TI), even as they are left unexplained under the traditional account. In this way we set up and defend the revised model of Algonquian argument structure morphosyntax needed to proceed with our analysis of how pronominal features behave in close configuration.

2.2 Morphosyntactic background

2.2.1 Affixal verbs

The model of verbal syntax in Algonquian offered here is very simple: a light verb, introducing one argument, is stacked over the remaining head-structure of the verbal predication complex.

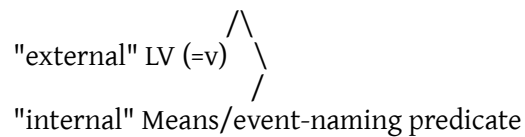
A number of special properties appears to characterize the collocation of this light verb and the element it most immediately Merges above. First, this collocation, while analyzable into two constituent parts, often appears to function (descriptively) as a single lexical unit. Second, it evidently determines the overall argument structure of the verbal stem. We introduce here the term *affixal verb* as a convenient label for this collocation.

Structurally, affixal verbs consist minimally of two elements:

- (a) an "external" light verb (LV), which acts as the predicate hosting the outermost or only argument, and
- (b) an "internal" Means or event-naming predicate (this includes RPs).

This is schematized in (1).

(1) Affixal verb collocation



We argue here that the "external" LVs are in fact the only elements in this structure that "agree" for their argument's [\pm NA] feature. In essence the system requires no fundamental categorical contrasts beyond a [+NA] light verb (LV^{NA}) and a [-NA] one (LV^{NI}). The "internal" element, which in traditional formal transitives (TAs and TIs) has standardly been viewed as the mark of stem-agreement (i.e. the Algonquianists' *Final*, or *Abstract Final*), will be seen to be sensitive to argument gender features only in an indirect sense, that is, by instantiating DAS or related effects---and thus is not fundamentally different from other "internal" elements, i.e. those found in plain intransitives. This uniform structural template for both transitives and intransitive is the first simplification introduced by the proposed model.

In (2) and (3) we see examples of transitive and intransitive affixal verbs respectively. Note in particular in (3) the incorporation-like alternations of "internal" Means/event-naming predicates (indicated by "[...]").

(2) Affixal verbs: transitives (TA/TI)

a. TA -ən.α 'by_hand.LV^{NA}

nəp̀sənα

nə-pis-ən.α-[w]

'I insert NA [by hand]' 1-into-by_hand.DIR-W

b. TI -ən.əm 'by_hand.LV^{NA}

nəpísənəmən

nə-pis-ən.əm-əne

'I place NI in, inside, I insert NI'

1-into-by_hand.LV^{NA}- N

(3) Affixal verbs: intransitives (AI "animate intrans"/II "inanimate intrans")

a. AI -[...]e 'NA DO...'

mánɔtak^we

man-ɔtak^w.e-[w]

'NA gathers, collects evergreen boughs'

removed-evergreen_bough.DO^{NA}-W

mánsewe

man-ahsew.e-[w]

'NA takes off clothes, undresses'

removed-clothing.DO^{NA}-W

b. II -[...]e 'NI EXIST...'

mk^wih^tak^we

məhk^w-əhtak^w.e-[w]

'NI is a red river'

red-river.LV^{NI}-W

mk^wəhp^ske

məhk^w-əhpək.e-[w]

'NI is a red rock'

red-rock.LV^{NI}-W

Here we also introduce the notational convention of setting off the LV with a period to its left, i.e. ".LV", with the "internal" element immediately preceding the period. Note too the use of three additional abbreviations for special LVs:

DIR = "Direct" LV^{NA}

INV = "Inverse" LV^{NA}

DO = "DO" LV^{NA}

The exact status of DIR and INV light verbs is deferred to the in-depth discussion of §4.2.2-3; for now these need only be read as the light verbs associated with a full [+NA] internal argument, which is traditionally termed a *Primary Object* (Rhodes 1990b; see also §2.4.2-5). The DO light verb is simply a frequent LV^{NA} with an unergative-forming function comparable to the light "DO" elements argued to covertly underly similar complex predications in Mandarin (cf. Lin 2001, *inter alia*), and particularly, to the v_{DO} of Hale and Keyser 2003, whose restriction to animate Agents is strikingly parallel to this element's evident restriction only to grammatically NA arguments.

Other LVs are left generically characterized as LV^{NA} or LV^{NI}, according to the gender of the argument they take. This generalized treatment includes even the special unergative LV^{NA} characterizing the TI collocation in (2b), so as to underline its basic unergative status; this will be discussed further in §2.4.7.

What we see in (2) and (3) is a very simple pattern. All verbal complexes terminate in a single light verb that matches a single argument and its gender, nothing more. This in contradistinction to the standard view, which takes TA-associated LVs---termed TA Theme Signs (abbreviated *ThS* above)---as sensitive to up to two arguments. This challenge to the traditional analysis is a core distinctive claim of the present work.

The full rationale for making this claim for TA Theme Signs is dealt with in §4.2.1, but in essence, it is simply a claim that the system's morphological elements display a consistent minimal complexity. That is, we take the basic pattern of LVs matching only a single argument and its gender that is already seen in the alternation of intransitive LVs in (4),

(4) Gender-sensitive alternation in intransitive LVs

-k.i	'NA has ... form, characteristic'
-k.ən	'NI has ... form, characteristic'

- | | | |
|----|---------------|-------------------------------------|
| a. | mkaséwiko | məhkasew-k.i-[w] |
| | 'NA is black' | black-have_form.LV ^{NA} -W |
| b. | mkaséwikən | məhkasew-k.ən-[w] |
| | 'NI is black' | black-have_form.LV ^{NI} -W |

and then suggest that this kind of gender-sensitive alternation of LVs in intransitives naturally extends into to a Person-sensitive alternation in the LVs of the only transitive collocations that can take SAP internal arguments. Namely, "TA" LVs (5).

(5) Person/gender argument-configuration sensitivity in TA LVs

- | | | |
|----|----------------------------|------------------------------|
| a. | nətihlək ^w | nə-ih-l.ək ^w -[w] |
| | 'he told me' | 1-tell-RP.INV-W |
| | (kesihlät (GD version):45) | |

- b. "...kətihlin↑." kə-ih-l.i-əne
 '...you [are to] tell me (Subord)' 2-tell-RP.LV¹-N
 (mətəwələnəwak kəyáhsopik:20)

In (5a) the Person-sensitive LV is *-.əkʷ*, and in (5b) it is *-.i*. Both LVs effectively indicate a first person Patient; the details of the mechanism that distinguishes them are discussed in Ch. 4. We also defer to Ch. 4 discussion of these LVs' additional configurational sensitivity to clause-type, since, as we will see there, this is only a secondary outcome of the basic characterization of these elements as Person-sensitive LVs. All we seek to do here is simply introduce this particular kind of transitive-associated element, and claim that it is parallel to the LVs characterizing intransitive stems: it is the only element of the affixal verb that actually exhibits agreement-like properties.

Treatment of TA Theme Signs as LVs is an approach not generally used by the bulk of Algonquianist literature, though it has appeared in passing in recent works by Bruening (2005, 2004) and Déchaine and Reinholtz (1998), with Hirose 2003's survey of light-verb-based complex predication in Plains Cree being a notable exception in focusing specifically on this view. Presumably the rather late emergence of this approach is due in part to the relatively recent recognition in generativist linguistics of the utility of a light-predicate-based models.

2.2.2 Contrast with standard Algonquianist model(s)

Traditional Algonquianist analysis attributes the basic argument-structural properties of a verbal stem to terminal morpheme complexes known as *Finals*, and divides them into four basic morphosyntactic types, defined according to two features: transitivity, and the gender of the Primary Object of a transitive or the only argument of an intransitive. Or, more informally, according to the gender of the absolutive argument. This gives four basic categories of Finals:

(6) Traditional Algonquianist verbal Final categories (after Bloomfield 1946)

TA	transitive animate
TI	transitive inanimate
AI	animate intransitive
II	inanimate intransitive

Rarely explicitly listed among these, but still usually noted, is an extension of the TA, the TA+O (TA + Object), which is the standard ditransitive.

In addition to the above four logical possible combinations of [\pm transitive] with [\pm animate] (= [\pm NA]), traditional analysis also has two extra "mismatch" categories:

(7) Traditional Algonquianist verbal categories: "mismatch" categories

AI+O	AI plus object
OTI	objectless TI

The mismatch is that AI+Os are morphological AIs (intransitives) that take (certain kind of) objects, and OTIs are morphological TIs (transitives) that do not or need not take an object. Algonquianist works are less clear on whether or not these are meant to be stem-level categories, or Final-level categories. This is perhaps because stems representing these categories are so defined by having Finals that are (for the most part) shared with regular AI and TI stems respectively: sets of exclusively AI+O or OTI Finals are hard to establish. Examples of these last two categories will be examined and dealt with in §2.4.8; for now, we note only that their self-contradictory names immediately hints at problems in the basic four-way categorization.

The present analysis adopts a much more restricted view. The only agreement-like contrast lies in the LV---be it part of an overall transitive configuration, or of an intransitive one. There are therefore just two basic gender-matching light verb categories: *LV^{NA}* and *LV^{NI}*. We emphasize here that DIR, INV, DO, and Person-sensitive LVs are just notational shorthands for predictable subtypes of the *LV^{NA}* category, and are not primitives. The traditional "four-plus-two" categories described above are in this new model simply recurrent configurations that derive from independent principles of the grammar; there is no need to stipulate them as basic morphosyntactic types or categories.

This reduced set of basic categories, combined with the DAS/antipassive analysis proposed to account for what has been traditionally characterized as the TA-TI stem-agreement system, also prevents an overgeneration problem inherent in the categorical feature set used in the traditional analysis. That is, as soon as we permit such exceptional categories as OTIs and extensions such as TA+Os, we must also explain the nonexistence of OTAs and TI+Os. No principled reason for this has been offered in the Algonquianist tradition (indeed, the problem does not seem to have been noticed at all). As we shall see, within the present analysis, OTIs, AI+Os, and TA+Os have independent motivations to exist, while OTAs and TI+Os simply do not.

This approach reduces the number of primitive categorical contrasts necessary to describe the full range of described properties of the verbal system to no more than that already needed to account for the remaining gender-sensitive morphology of Algonquian languages. In other words, nominal-associated agreement. Such elements include numerals (8a) and demonstratives (8b).

(8) [±NA] contrast in numerals and demonstratives (glosses adapted from PD)

NA

NI

- | | | | |
|----|--------|-----------------------|-----------------------------|
| a. | pèsəko | pèsək ^w ən | 'one...! (PD:364) |
| | nləwak | nhànoł | 'three...! (PD:330, 321) |
| b. | owa | iyo | 'this...! (PD:344, 164) |
| | na | ni | 'that...! (PD:293, 321) |
| | iya | iye | 'that (yonder)...! (PD:164) |

So: to cover both these and the more complex patterns of verbal argument-marking, we need no more than simple semi-lexical elements that contrast the gender (and/or Person) of one argument only.

This will be a significant claim of this work: while the overall morphosyntax might look otherwise, configurational sensitivity in LVs is actually only indirect, with a given LV essentially matching only one argument---and thus the LV-based syntax of verbal constructions, both transitive and intransitive alike, is basically no different from that of the nominal-associated elements in (8).

The present proposal is therefore attractive in that it radically reduces the set of language-specific categories needed for a descriptively adequate account of Algonquian verbal morphosyntax, and unifies it with nominal morphosyntax as well. And of course, since it sets up rather specific claims and predictions about what sorts of precise configurations give rise to these effects and their associated verbal and nominal morphology, this particular model is the foundation of the argumentation in Chapter 3 and Chapter 4 regarding the analysis of pronominal-feature configuration effects.

2.2.3 Stem-agreement: the traditional view of Algonquian transitive verbal stems

A simple illustration of one of the core problems of the traditional model comes from its claim

that the terminal elements of Algonquian transitive verb stems themselves agree for the [\pm animate] gender feature of their internal argument. Such a model contrasts stems whose terminal elements (technically, *Finals*) are Transitive Animate (TI) with those that are Transitive Inanimate (9).

(9) Transitive "stem agreement" (Penobscot; after Bloomfield 1946, Rhodes 1976)

TA: Transitive Animate

<i>nəkəlápí{ll}α</i>	<i>nə-kəl-ápí{ll}.α-[w]</i>
'I tie NA, tie NA up, tether NA'	1-fixed-tie{ <i>TA</i> }.ThS-W

TI: Transitive Inanimate

<i>nəkəlápí{t}on</i>	<i>nə-kəl-ápí{t}.o-əne</i>
'I tie NI'	1-fixed-tie{ <i>TI</i> }.ThS-N

Here the italicized elements are TA and TI Finals; the elements set off with braces are the segment of each Final held to be agreeing with the Primary Object. Some authors call these (or a subset thereof) TA and TI *Abstract Finals* (Rhodes 1980); we adopt the more explicitly descriptive terms *TA-markers* and *TI-markers* respectively. Notably, the immediately following morphology (the elements called *Theme Signs*, abbreviated above as *ThS*) effectively doubles this agreement, a redundancy left unexplained in this system.

And indeed, a significant problem with this model is that TA/TI-markers do not on their own match particularly well with the gender of the internal argument. That is, a change in the morphology that follows the TA/TI-markers can give the reverse featural argument structure, i.e. a NI argument for a TA-marked stem (10a), or a NA argument for at TI-marked one (10b).

(10) Argument structures contradicting TA/TI markers

a. NI with TA-maker

εσάραμακ ^w e	es-αp-am.ək ^w .e-[w]
'NI passes light, is transparent'	through-look-TA.INV.LV ^{NI} -W

cf. TA: $\eta\acute{\tau}\epsilon\sigma\alpha\mu\alpha$ $\eta\acute{\tau}\epsilon\sigma\alpha\mu.\alpha$ -[w]
 'I see through NA (used figuratively)' 1-through-look-TA.DIR-W

b. NA with TI-marker

ναμίητασο	$\eta\acute{\tau}\epsilon\sigma\alpha\mu.\alpha\sigma\iota$ -[w]
'NA/NI is seen'	1-seen-cause.TI.mdrf x.LV-W

$\eta\acute{\tau}\epsilon\sigma\alpha\mu\iota\eta\tau\alpha\sigma\iota$	'I...'	(= [+NA] argument)
$\eta\acute{\tau}\epsilon\sigma\alpha\mu\iota\eta\tau\alpha\sigma\omega\lambda$	'they (NI) are seen'	(= [-NA] argument)

cf. TI: $\eta\acute{\tau}\epsilon\sigma\alpha\mu\iota\eta\tau\omega\lambda$ $\eta\acute{\tau}\epsilon\sigma\alpha\mu.\alpha\omega\lambda$ - $\eta\acute{\tau}\epsilon\sigma\alpha\mu$
 'I see NI' 1-seen-cause.TI.LV^{NA}-N

The nature of these stems is actually a step more complex: as (10b) shows, some appear to be able to take arguments of either gender. This flexibility explains readily under the present model, which claims that verbal argument structure is actually determined finally by the topmost LV---here, the element preceding the -W or -N morphemes---and that these LVs can

be underspecified for gender. The details of LV usage in this model are discussed in §4.6.1; we present these examples here just to highlight the problem of oversimplification that comes from maintaining traditional Algonquianist verbal categories as primitives.

2.3 Transitive Animate (TA) as head-marking dative-accusative syncretism

2.3.1 Overview

The purpose of this section (§2.3) is to clarify the nature of the TA construction by observing certain constraints on its distribution. Contrary to the basic characterization implied by the traditional "Transitive Animate" label, not all [+NA] notional direct objects actually take a TA construction. Two cases exist where they consistently do not: when they are property-denoting, non-argument elements (cf. Bleam 2000), and when they are the structural Theme of a double object construction. In both cases, the special status of the [+NA] notional direct object is lost, and neutralized to the same syntactic treatment as [-NA] notional direct objects in the same context.

The striking fact is that these constraints precisely match the set of exceptions to the use of a dative marker for [+animate] notional direct objects in dative-accusative syncretic languages such as Spanish and Hindi-Urdu. These parallels form the primary backing for our core claim: that the TA construction is a head-marking realization of a dative-accusative syncretism (DAS) construction.

These parallels are laid out as follows.

In §2.3.2 we first lay out the most basic parallel: that [+NA] notional objects in Penobscot in general receive a morphosyntactic treatment quite distinct from [-NA] ones, and that this treatment bears the hallmarks of dative morphosyntax, and thus strikingly resembles to the differential treatment of [+animate] notional direct objects in Hindi-Urdu and Spanish---that is, dative-accusative syncretism.

From there we examine the two "special-status" neutralization effects shared between Algonquian [+NA] notional direct objects and [+animate] ones in established DAS systems. In §2.3.3 we first show that TA constructions are not used when the [+NA] notional direct object is only a property-denoting element, and not a full argument (and surfaces as a morphophonological incorporant), and demonstrate that this is also precisely where dative marking is absent for [+animate] notional direct objects in Spanish and Hindi-Urdu. We attribute this to such arguments lacking the structural layer containing the [±animate/NA] feature, and go on to show how this clarifies a possible confusion of this "bare" status with non-predicative indefinite status, which in certain Algonquian transitivity systems maintains a clearly distinct treatment, one that still involves DAS.

From there, in §2.3.4 we demonstrate how [+NA] notional direct objects are demoted to Secondary Object status---and so not by TA-markers---when embedded as the Theme argument in a double object construction, and show again that this is still another context where Hindi-Urdu and Spanish [+animate] notional direct objects lose their special dative treatment.

With these syntactic parallels in hand, in §2.3.5 we lay out how DAS syntax is predicted to manifest in a heavily head-marking language such as Penobscot. Namely, via a set of bound elements of the verbal complex that act as an equivalent to a DAS-satisfying adposition or case-marker by introducing a [+NA] notional direct object in a structurally high position (i.e. immediately below the light verb). We identify what has been called stem-agreement for a [+NA] notional direct object---the TA-markers---as these very elements, to which we give the term *Relational Predicates*. In §2.3.6-7 we support this analysis first with two points of morphosyntactic evidence that the Relational Predicate and its associated [+NA] notional direct object are syntactically high relative to other elements in the configuration (§2.3.6). And then in §2.3.7 we add to this evidence from the interpretational contribution of Relational Predicates, showing that this consistently matches that of canonical high argument-introducing predicates such as Applicatives and causatives, among others.

2.3.2 DAS and animacy of notional direct objects

Penobscot and other Algonquian languages clearly do exhibit a differential treatment of notional direct objects that is directly sensitive to the grammatical gender contrast. This, after all, is the source of the traditional paired categories of Transitive Animate and Transitive Inanimate, exemplified in (11).

(11) TA/TI contrast (Penobscot)

a. TA: -l.α 'cause.DIR'

nəkəlápilα	nə-kəl-ap-l.α-[w]
'I tie NA, tie NA up, tether NA'	1-fixed-tie-RP.DIR-W

TI: -l.t.aw 'cause.LV^{NA}' (-l.t → -t)

nəkəlápiton	nə-kəl-ap-l.t.aw-əne
'I tie NI'	1-fixed-tie-RP.T.LV ^{NA} -N

b. TA: -ən.α 'by_hand.DIR'

nəpìsənα	nə-pis-ən.α-[w]
'I insert NA [by hand]'	1-into-by_hand.DIR-W

TI: -ən.əm 'by_hand.LV^{NA}'

nəpísənəmən

nə-pis-ən.əm-əne

'I place NI in, inside,

1-into-by_hand.LV^{NA}- N

I insert NI'

In short, the Algonquian contrast is an obligatory morphological distinction made within certain elements of a transitive verbal construction that tracks the gender features of the notional direct objects---gender features ([±NA]) which correspond closely to animacy features. But why should we specifically consider this comparable to the dative-accusative syncretisms seen in languages like Hindi-Urdu and Spanish?

The first reason is quite simple: across the Algonquian family, basic verbal marking for a notional direct object [+NA] argument is identical to that of notional indirect object [+NA] argument. In an early discussion of this phenomenon, Rhodes 1976:139, using Relational Grammar terms, calls this phenomenon *Indirect Object Advancement*. In his model, notional indirect objects (12) advance to direct object, and hence they receive the final surface treatment common to (notional) [+NA] direct objects (13). In this example, the identical treatment is the morphology known as the Direct element, which in Ojibwa appears as *-a:*.

(12) Indirect Object Advancement in Ojibwa (Rhodes 1976:139:(26))

a. ngi:-mina: mzinhigan ža:bdi:s 'I gave John a book.'

/n - gi: - mi:n - ø- a:/ BOOK JOHN

1 PAST GIVE TSA OAI

b. ngi:-šama: wi:ya:s nday 'I fed my dog meat.'

/n - gi: - ašam - 0- a:/ MEAT MY-DOG [sic "0" for "ø"]

1 PAST FEED TSA OAI

- (13) Surface treatment of notional [+NA] direct objects (Rhodes 1976:104:(47d))

nwa:bma: 'I see him'

/n-wa:bam-ø-a:/

1 SEE TSA OAI

This syncretism is a core feature of Algonquian languages; hence the identical pattern appears in Penobscot (14), where the Direct element, $-\alpha$, is the common element triggered both by a [+NA] notional indirect object (the "NA" recipient) in (14a) and a [+NA] notional direct object (the "NA" insertee) in (14b).

- (14) Identical treatment of NA notional direct and indirect object in Penobscot

- | | | | |
|----|-------------------------|----------------------|---------------|
| a. | nəmíłanal nətémisal | nə-m-l.α-əne-al | nə-em-s-al |
| | 'I give NA my dog' | 1-give-RP.DIR-N-obv | 1-dog-DIM-obv |
| b. | nəpìsəna | nə-pis-ən.α-[w] | |
| | 'I insert NA [by hand]' | 1-into-by_hand.DIR-W | |

There is a significant difference in the present analysis of this syncretism, however. Namely, that we view the collapse of the dative-accusative distinction as a collapse towards the structure of the dative, as it were, rather than the reverse view, i.e. of promotion of an indirect object to a direct object. This is an outcome of the RP-based model, which attributes the identical treatment of Goal argument in (14a) and notional direct object in (14b) to both being introduced at the same point in the structure, i.e. as an argument of the RP, and thus also the

argument closest to the LV (surfacing here as the Direct morpheme).

Rhodes 1976 works in Relational Grammar, which takes notions such as direct object and indirect object as primitives/primes, and so explicitly cannot claim that the indirect object is assigned differently in Ojibwa than in English (Rhodes 1976:141). A pattern such as that seen in (12) and (14) therefore requires an advancement rule. In the present model, notions like direct object and indirect object are not primitives, but purely descriptive outcomes of final configuration (in essence, the argument-configuration-sensitivity of many Relational Grammar advancement rules reflects this perspective).

The particular advantage of the present approach is its simplicity: there is no conversion between indirect object and direct object. In fact, no real notion of direct object is needed, since the overarching advancement rule is reanalyzed in terms of DAS-driven Applicativization---or, more precisely, relational-predicativization---causing two usually structurally distinct notional argument types ([+NA] indirect object, and [+NA] non-ditransitive direct object) to end up with the same configurational syntax.

This, then, is how the TA construction treats the notional indirect objects of ditransitives (TA+Os) identically with [+NA] notional direct objects of monotransitives (TAs). In other words, we see [+NA]-sensitive dative-accusative syncretism.

In Hindi-Urdu we find an identical pattern, manifested not on the form of the verbal complex, but on the relevant nominal argument: "specific" animate objects require *-ko*, an element homophonous with the *-ko* found on goals/recipients---and so hence generally identified as a dative marker (15a). The generally obligatory use of this element with animate direct objects is illustrated in (15b).

(15) Dative-accusative syncretism in Hindi-Urdu (Butt 1995, Mohanan 1990): dative-accusative case-particle *-ko*

a. Dative *-ko* for goal (Mohanan 1990:85:40a)

ilaa-ne mǎã-ko yaah haar diyaa
 Ila-E mother-D this-N necklace-N give-PERF

'Ila gave this necklace to the mother.'

- b. Obligatory *-ko* for animate object (Mohanani 1990:80:32, 33)

ilaa-ne bacce-ko / *baccaa uṭʰaayaa
 Ila-E child-A child-N lift/carry-PERF (= rise-CAUS-PERF)

'Ila lifted the child.'

ilaa-ne haar uṭʰaayaa
 Ila-E necklace-N lift/carry-PERF (= rise-CAUS-PERF)

'Ila lifted a/the necklace.'

Parallel DAS effects are reported for Spanish: the discussion of Bleam 2000:160 offers the generalization that "[a]nimate direct objects (which are interpreted as specific) are marked with the morpheme *a*, which is homophonous with the dative case marker." This is shown in the examples in (16) which also illustrate the general ill-formedness of mismatches---i.e. animate direct objects without *a*, or inanimate direct objects with it.

- (16) Dative-accusative syncretism in Spanish (Bleam 2000:161-2): dative (-accusative) adposition *a*

- a. Vi a la mujer *Vi la mujer
 I.saw *a* the woman I.saw the woman

'I saw the woman'

- | | | |
|----|-------------------|-----------------|
| b. | Vi a-l gato | *Vi el gato |
| | I.saw a-the cat | I.saw the cat |
| | 'I saw the cat' | |
| c. | *Vi a la mesa | Vi la mesa |
| | I.saw a the table | I.saw the table |
| | 'I saw the table' | |

These two sets of examples set up the depth of the parallel: Algonquian TA constructions do not parallel these Hindi-Urdu and Spanish cases simply in having differential treatment of basic [+animate] notional direct objects; they also match in having this treatment collapse the distinction between dative and accusative. The missing element of the comparison is of course the element corresponding to Spanish *a* and/or Hindi-Urdu *-ko*. It is less than obvious, for example, that the causative TA-marker *-l* in (11a) is comparable to a dative preposition or case-marking clitic, let alone the instrument-naming predicate TA-marker *-ən* 'by hand' in (11c), particularly since it appears to show up in the TI forms as well! The explanation for this is found in §4.6; what we assert here is simply that the TA construction shows clear formal parallels to standard examples of dative-accusative syncretism.

2.3.3 DAS and property-denoting notional direct objects

[+NA] notional direct objects always do not trigger TA constructions, however. When these appear as a property-denoting element (Bleam 2000:170, after Van Geenhoven 1997, 1996, 1995) rather than as a full argument, no TA construction is engaged, and instead, such [+NA] notional direct objects (like [-NA] ones as well) can appear instead as a (descriptive) incorporant into the

verbal complex.

By example, in (17a), the notional direct object *-ess-* 'clam' is otherwise grammatically [+NA]: hence its plural form takes NApl *-ak*, giving *èssak* (PD:152). But here it requires no TA construction: there is no evidence of an RP, and instead, a plain intransitive form is found. According to the basic "affixal verb" structure set out in (1), the position of the *-ess-* element as immediately adjacent to the LV (the "DO" light verb familiar from §2.2.1) predicts that it will function as a Means or event-naming predicate: in other words, it should denote a property, rather than an individuated argument of the predication, i.e. something that could be interpreted as specific.

While there is no explicit grammaticality-judgement-based evidence ruling out specific argument readings for this kind of incorporant, usage and gloss attestations of this and comparable forms suggest that only nonspecific/generic-type readings like that of the glosses in (17) are possible.

In (17b) we show how this context nullifies any contrastive properties of [+NA] versus [-NA] arguments. Incorporants commonly drop initial onset consonants, such that *-awan-* 'egg' is just an expected bound form of *wáwan* 'egg' (PD:454), a lexeme attested as grammatically [-NA] through its NI-class plural in *-al --- wáwanal* (PD:454). Though [-NA], this meets the same treatment as [+NA] *-ess-*: no special TI construction appears, either.

(17)	Penobscot "incorporation"	(PD:251)
a.	<i>mánesse</i> 'NA gathers clams/shellfish'	<i>man-ess.e-[w]</i> removed-clam.DO ^{NA} -W
b.	<i>mánawane</i> 'NA gathers, collects eggs'	<i>man-awan.e-[w]</i> removed-egg.DO ^{NA} -W

A limitation of this pattern should be pointed out from the start. Such forms, while clearly productive at one point in the history of the language, and perhaps still semi-productive in certain cases, are quite "lexical" in their distribution (Denny 1989), as they derive only with elements having corresponding bound-morpheme equivalents. This stands in contrast to the more productive incorporation patterns Baker (1996, 1988) discusses for Northern Iroquoian and Southern Tewa.

What keeps these forms as relevant data is the evident consistent interpretational effect of this structure: these non-individuated elements name predicates, not arguments. We take this as evidence that this kind of collocation is the Penobscot syntactic parallel to the Hindi-Urdu form in (18a). This is the exception to dative-marking for an [+animate] notional direct object reported by Mohanan 1990:80, who states that "NOM" animate objects (i.e. those without *-ko* marking), are only available "when they have a reading in which they are 'incorporated' into the predicate." Contrast (18a) with the "incorporated" nominal with the corresponding specific argument (18b).

(18) Hindi-Urdu *-ko*: "incorporation" (Mohanan 1990:80:ft30)

a. ravii (ek) gaay k^hariidnaa caahtaa hai
 Ravi-N (one) cow-N buy-NF wish-IMPERF be-PR
 'Ravi wishes to buy a cow (with no particular cow in mind).'

b. ravii (ek) gaay-ko k^hariidnaa caahtaa hai
 Ravi-N one cow-D buy-NF wish-IMPERF be-PR
 'Ravi wishes to buy a (particular) cow.'

Bleam 2000:166-186 defends in extensive detail the same general view for a comparable set of

exceptions to *a*-marking of animates in Spanish, concluding that the relevant distinction determining when an [+animate] notional direct object will not be *a*-marked is when it denotes a property rather than an argument. Mohanan refers to the pattern as a kind of incorporation: but this actually matches Bleam's analysis in spirit, as she explicitly treats these forms as involving semantic incorporation (Van Geenhoven 1997, 1996, 1995). In Penobscot this coincidentally surfaces as morphophonological incorporation as well. We will therefore assume it is property-denoting, predicative status, i.e. syntactically, the notional direct object manifesting as a 'bare' root element that is incorporated directly as an adjunct of the V head (or simply remains low in VP, cf. Diesing 1992), that leads to this pattern.

This particular analysis avoids the problems that might arise were we to simply attribute this exception to DAS marking to nonspecificity or indefiniteness. Here a serious set of counterexamples would come from Eastern Algonquian languages that maintain a contrast between "objective" and "absolute" forms of transitive verbal complexes. As an example, Goddard 1974 reports for Munsee (among others) that objective forms (19a), characterized by use of Peripheral Endings (see §2.4.2) and concomitant Theme Signs (in present terms, Peripheral Endings and LVs), are used with overt Primary Object nouns to indicate their definiteness.

And correspondingly, absolute forms (19b), which are characterized by the absence of Peripheral Endings (with concomitant surface effects on Theme Signs) on the verbal complex, correspondingly indicate indefiniteness of the Primary Object.

The potentially problematic fact is that absolute-marked and objective-marked constructions are both TA constructions (and the same contrast applies to TIs as well). Thus even constructions with indefinite [+NA] notional direct objects exhibit RPs: a definiteness contrast operates independently over forms that both have Relational Predicates (cf. separability of definiteness and human/animateness hierarchies with regard to differential object marking in Aissen 2003).

(19) Objective-absolute contrast (Munsee, TA forms only)

a. Objective

kǎmoháwak óhpənak Goddard 1979:40

'you (sg.) eat the potatoes'

wǎnìhláwal máxkwəl Goddard 1974:318

'he killed the bear(s) [obv.]'

wǎníhlko-l máxkwəl Goddard 1974:320

'the bear(s) (obv.) killed him'

b. Absolute

kǎmóha óhpənak Goddard 1979:41

'you (sg.) eat some potatoes'

xwé·li máxkwəl níhle-w Goddard 1974:318

'he killed many bears [obv.]'

máxkwəl níhləkw Goddard 1974:320

'a bear, some bears (obv.) killed him'

This contrast, which is morphologically manifest only in the Independent Indicative (IdpIdc) clause-type, is reconstructed for Proto-Algonquian, but has only survived in a subset of the Eastern Algonquian languages, including Munsee-Unami (Delaware), Wampanoag

(Massachusetts), Mahican, and Western Abenaki. It was lost in Central Algonquian languages, whose present transitive paradigms have elements of both objective and absolute morphology. It was also lost in Eastern Abenaki (including Penobscot) and Passamaquoddy-Maliseet, which generalized the objective (definite object) pattern.

For a DAS-based analysis of TA constructions to maintain, definiteness cannot be taken to be the sine qua non characteristic of DAS. As this would mean that absolute stems taking indefinite [+NA] internal arguments should not have Relational Predicates, since Relational Predicates (i.e. what characterizes these elements as TA stems; see §2.3.7) are claimed to be manifestations of DAS morphosyntax. But they do: the forms in (19b) all have the distinctive TA-marker/Relational Predicate in *-l* (compare again to (9)).

This is not a problem, however, because we have already seen in (18b) that specific indefinites can trigger DAS-marking in Hindi-Urdu. And indeed, these languages do in fact also exhibit a cognate to the Penobscot cases of DAS-less [+animate] notional direct object seen in (17). That is, they too exhibit the same "incorporation" of a notional direct object (20b, c, d, e) interpreted as generic/unindividuated element (i.e. as a property), and again, even if this element is [+NA] when manifesting as a full argument nominal (20a).

- | | | |
|------|---|------------------|
| (20) | Munsee "incorporation" | (italics mine) |
| a. | <i>óhpun</i>
NA: 'potato' | O'Meara 1996:211 |
| b. | moonhíhpűneew
'[NA] dig up potatoes' | O'Meara 1996:174 |
| c. | pxwashíhpűneew
'[NA] peel potatoes' | O'Meara 1996:270 |

- d. *kahkhíhpűneew* O'Meara 1996:73
 '[NA] scrape potatoes'
- e. *makunhíhpűneew* O'Meara 1996:155
 '[NA] pick potatoes'

We suggest, then, that the Hindi-Urdu form in (18a) corresponds most closely to the "incorporation" forms in (17) and (20), and not to the absolutes in (19b). That is, as has been independently suggested for Hindi-Urdu and Spanish, these Algonquian exceptions are also not due to indefiniteness or even nonspecificity, and instead reflect the barest status of all: predicative (property-denoting) status.

We may preliminarily propose a straightforward reason for this. A number of complicated facts about Algonquian gender alternation (see Quinn 2001) can be treated quite simply if [\pm NA] status is held to be a feature not of the listemes (Borer 2005a/b) themselves, but of the collocation of listeme plus light noun, with the light noun (or further higher associated element) carrying the gender feature. This is evidently what a Borer/Marantz-style model would already assert for the syntax of an individuated nominal, and would mean that we are not claiming that a structurally complex [+NA] nominal incorporates, only the gender-unspecified listeme associated with a [+NA] nominal.

If this is the correct line of analysis, it would also explain the Hindi-Urdu and Spanish cases of DAS-less [+animate]s as well, since these too would lack the syntactic layer carrying the [+animate] feature.

A further natural prediction of this analysis is that this incorporation-like pattern need not be a unique property of (otherwise) [+NA] notional direct objects. And sure enough, roots associated with [-NA] gender are also attested in this pattern, as seen in (17b).

In other words, what happens in such contexts is that the special constructional effects

associated with the [\pm NA] status of the notional direct object are neutralized---i.e. there is no special TA form, nor a TI form, for that matter---which is precisely what we find exemplified for [\pm animate] status in the Hindi-Urdu example in (18a).

In this model, we must take the indefinite notional direct object arguments of absolute forms to be in some sense be distinct from "incorporated" arguments---first and foremost if only to avoid structural synonymy. Their contrast comes from these indefinites having at least individuated nominal referents, i.e. having a light noun, which in turn carries gender---a view which matches up with the observation these forms do trigger the TA-TI contrast. In the case of [+NA] arguments, this means triggering DAS effects, and thus explains the presence of Relational Predicates in absolute forms.

2.3.4 DAS and double-marking (marking competition) constraints

We now come to the second instance of neutralization of the special status of a [+NA] notional direct object: when it is the Theme element in a configuration that also involves a structural Goal argument.

In such cases, the [+NA] Theme argument is demoted to the morphosyntactic status that Algonquianists term *Secondary Object* (Goddard 1979, Rhodes 1990b, 1976).

Secondary Object status is reflected on the verbal complex (of the Independent Indicative clause-type) by *N-Peripheral Marking*. This morphology consists first of the *N-element*, a morpheme *-ən(e)* that appears immediately adjacent (and external) to the light verb; only negation concord may intervene between the two. In addition to this, marking that distinctively matches the Secondary Object argument for number, gender, obviation, and absentativity, called *Peripheral Endings* (Goddard 1979, 1974, 1967), appears in the endmost position on the verbal complex. Secondary Object status and morphology is discussed in more detail in §2.4.2-5.

Consider the example in (21a). Here, in the presence of a Goal (glossed as "NA" here),

the [+NA] notional direct object, *nətémisal* 'my dog', appears as a Secondary Object: it triggers the appearance of the N-element, and also of matching Peripheral Ending morphology, in this case the Obviative singular ending *-al*, which is also found on the the overt Secondary Object nominal itself.

(21) Penobscot DAS competition: [+NA] Theme of ditransitive

<i>nəmílɔnal nətémisal</i>	<i>nə-m-l.ɔ-əne-al</i>	<i>nə-em-s-al</i>
'I give NA my dog' (PD:280)	1-give-RP.DIR-N-obv	1-dog-DIM-obv

As far as I know, this type of demotion in the presence of a Goal argument is the only possible ditransitive pattern in Algonquian languages: there are no ditransitive constructions with an adpositional Goal and Theme as Primary Object.

Here again, the striking effect is how this demotion neutralizes the treatment of [+NA] and [-NA] notional direct object arguments. Once again, the treatment of a [+NA] notional direct object is rendered fundamentally the same as that for a [-NA] one, as seen in (22), where the NI Secondary Object *sàhtal* 'blueberries' again triggers the presence of the N-morpheme with a matching Peripheral Ending (this time the NI plural ending *-al*), which again is also seen on the overt nominal.

(22) Penobscot DAS competition: [-NA] Theme of ditransitive

<i>kəpečíptolənal sàhtal.</i>	<i>kə-pet-pVh.t.aw.əl-əne-al</i>	<i>sahte-al</i>
'I bring thee some blueberries' (S:60:6)	2-arrive-grab.T-RP.LV ² -N-NIpl	blueberry-NIpl

Unlike in the previous section, however, the neutralization need not and should not be attributed to a stripping-down-to-bare-listeme effect. This is because the [+NA] argument

shows clear evidence of retaining [+NA] argument features: in this case, it is overt marking of Obviative status, which is only found for [+NA] arguments in Penobscot.

Parallels to this in established DAS systems are easy to demonstrate: Hindi-Urdu has a constraint against double *-ko* (23) and Spanish one against double dative clitics (24).

(23) Hindi-Urdu: anti-double *-ko* constraint (Mohanani 1990:85:40c)

ilaa-ne	mãã-ko	baccaa	/*bacce-ko	diyaa
Ila-E	mother-D	child-N	/ child-A	give-PERF

'Ila gave a/the child to the mother.'

(24) Spanish: anti-double-dative constraint (Anagnostopoulou 2003:292:(382))

Te	lo	/*le	dí.
Cl-2DAT	3-ACC{Acc/-animate}	*Cl-3ACC{Dat/+animate}	gave-1sg

'I gave it to you / *I gave him to you.'

Specifically, Mohanani notes that the dative/Goal *-ko* always outcompetes an [+animate] Theme for marking with *-ko*, showing exactly the same resolution of competition seen in the Penobscot example in (21). And then for Spanish, Anagnostopoulou 2003:292:(382) reports a comparable effect manifested within the object clitic system (24). There the dative clitic normally associated with an [+animate] notional direct object is blocked from representing the Theme argument of a ditransitive, and so is replaced with the plain accusative clitic used for [-animate] s. Here in particular there is an obvious indication of a parallels to the Person-Case Constraint (Anagnostopoulou 2003, Boeckx 2000, Bonet 1995, 1994, 1991). We will not attempt to explain

this aspect of the phenomenon (though we return to it somewhat in §2.4.2-5), but simply point it out as a further parallel between constraints on established DAS phenomena and those seen operating on the use of the TA construction in Algonquian languages.

We have now seen three distinctive interrelated features of the DAS phenomenon, which can be summarized as follows: the DAS contrast is tightly associated with [+animate] notional direct objects in general, but then collapses their treatment with [-animate] notional direct objects in certain contexts, namely, when notional direct objects denote properties rather than arguments (i.e. they are purely predicative), and also when they are embedded as the Theme argument in a double object configuration. All three of these properties also characterize constraints on the use of Algonquian [+NA] notional direct objects with TA constructions, and so support the view that the TA construction is a DAS construction.

A fourth property of DAS is that it typically manifests in the form of dative-like adpositional or case element. Demonstrating that this too finds a parallel in the TA system is the subject of the next section.

2.3.5 The syntax of TA constructions: DAS and the head/dependent-marking parameter

Hindi-Urdu and Spanish are, in the morphosyntactic typology of Nichols 1986, chiefly dependent-marking. That is, they express argument-structural status primarily via adpositional/case-marking morphology on overt nominal arguments, rather than strictly on the verbal complex. (Spanish pronominal clitics, of course, represent a more head-marking-like pattern).

As we would expect---and as we have seen---DAS effects in these two languages accordingly manifest through dependent-marking morphology, i.e. via an adposition (Spanish) or case-marking clitic (Hindi-Urdu).

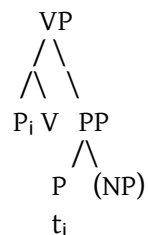
Penobscot and other Algonquian languages, on the other hand are fairly radically head-marking. Nominal morphology of the adpositional/case-marking kind is evidently strictly

limited to non-core/non-argument structural adpositional relations, i.e. the spatial, temporal, and similitive locatives (and possibly causal as well). In other words, all of these elements are evidently strictly of the transparent "semantic case" type only. (However, see §2.4.4 for speculation that the Obviative might well be the crucial counterexample to this standard view).

We thus predict that in an Algonquian language, the only available morphological means to manifest a dative-accusative syncretism will necessarily be affixal to the verbal predicate complex. In other words, verbal incorporation of adpositional element comparable to Spanish dative-accusative preposition *a*.

This is in essence the Baker 1988 structure for an Applicative.

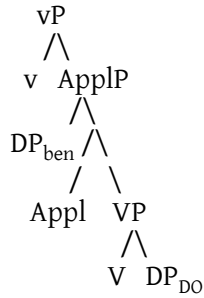
(25) Applicative syntax (after Baker 1988)



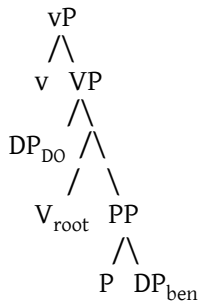
(25) is actually only one kind of Applicative, however. Subsequent work on Applicatives, particularly that of Pylkkänen 2002, 2001 has identified two kinds of Applicatives, distinguished from each other by the position of the adpositional/Applicative element relative to the V + direct object complex. These are the High Applicative (26a) and Low Applicative (26b).

(26) Applicatives (after Rackowski & Richards 2005:571:(12))

a. High Applicative



b. Low Applicative (or, Prepositional Benefactive)



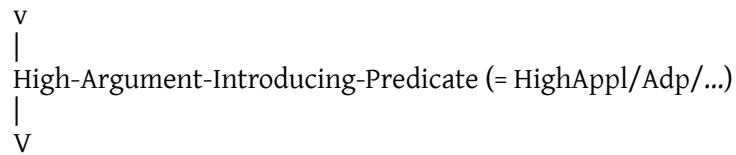
As we shall shortly see, the evidently most effective account available for the morphological and syntactic properties of TA stems is one that sets up the TA-marker as an argument-introducing predicate that scopes as the element most immediately under the light verb (i.e. *v*) here, and itself scoping above the lexical *V*.

The structure we propose for TA constructions is thus closest to the High Applicative structure in (26a), rather than the Low Applicative (or Prepositional Benefactive) in (26b).

Our claim, however, is not that the TA construction is strictly an Applicative: what we claim the core TA-stem-marking morphology is not lexical "stem-agreement" for the [+NA] primary object, but instead is the head-marking equivalent of the adposition/case-particle-type head required to realize the dative-accusative syncretism triggered by [+NA] status of a primary object.

That is, abstracting just to head-to-head structure:

(27) TA syntax



This abstraction is needed because the range of elements functioning as TA-markers includes more than just familiar High Applicatives, though these still do make up the bulk of the set.

This in turn comes from the following generalization: that adpositions, case-particles, structurally "high" serial verbs (e.g. TAKE, CAUSE, GIVE), causatives, and Applicatives share a basic capacity to introduce (or at least license) an added argument in a position that scopes over additional internal arguments (e.g. a ditransitive Theme).

What we have just listed constitutes broad class of otherwise rather distinct syntactic entities. Extending Borer 2005 and Marantz 1997, we attribute the surface-syntactic differences between these categories to the extent and type of syntactic-featural structure co-morphologized as a single unit together with this high argument-introducing predicate, with the phonological dependence of the surface morphemes also a contributing factor. That is, their major differences come from what they are (or are not) bound up with morphologically.

In a head-marking system with extensive and rather analytic bound morphology, such as that seen in Algonquian languages, we expect to see such high argument-introducing predicates manifest in a very minimal form, i.e. one with little to no extra structural material: in other words, morphophonologically, as an affix, and syntactically, as a head.

In this set of elements, familiar "dative" Applicatives would be just one subtype; others in the set would include causatives and instrumental Applicatives. And again, their crucial shared morphosyntactic feature would be their high position in the transitive complex predication, immediately below the transitive structure's light verb, along with their ability to introduce an argument in that same position.

This is the basic claim, then: that this set of high argument-introducing predicates is what TA-markers actually are, and is also what allows them to pattern according to the constraints of DAS systems.

Consider a less extreme alternative: that the TA construction is simply the only true basic transitive construction in the Algonquian transitivity system, such that TA-markers are simply transitivizers, a class which naturally includes Applicatives, causatives, and so forth. We choose to push the more radical claim here, that TA-markers are not just transitives in some general sense, but specifically structurally high argument-introducing predicates, because this, unlike the muted alternative, offers a direct explanation as to why the TA construction exhibits such consistent parallels to DAS constructions.

Since the term "transitivizer" is inadequate for such purposes, then, we offer the descriptive label *Relational Predicate* (RP) for members of this set, this being a term better reflecting the non-language-specific characterization of TA-markers. A partial list of Relational Predicates is given in (28).

(28) Relational Predicates (RPs)

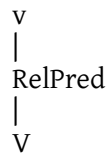
dative-Applicatives (benefactive, malefactive)

causatives

instrument-naming high argument-introducing predicates (handling, grabbing, using)

These, we shall see, are precisely the set of elements we find characterizing TA-markers. From here on, then, we assume a basic head structure as follows, replacing the unwieldy term of "High Argument-Introducing Predicate" with the descriptive label "Relational Predicate", as in (29).

(29) TA syntax (revised)



Note that in morpheme glosses we abbreviate "RelPred" as "RP", as there is no danger there of misreading it as a phrase-level category (i.e. reading "RP" as some kind of XP).

To recapitulate the core claims: [+NA] notional direct objects are, generally, triggers of DAS. As such, they require a head-marking equivalent to DAS case morphology: a scopally high argument-introducing bound morphosyntactic element, which we term a Relational Predicate.

In the immediately previous sections we examined evidence that TA constructions have the distribution of established DAS patterns. In the next two sections we look language-internally. First, in §2.3.6, we point out that the structure in (29) predicts that two morphosyntactic properties should characterize all TA-markers and TA constructions: close morphological adjacency of RP to LV, and high scopal status of the argument introduced by the RP element---and show that this is indeed the case.

Then in §2.3.7, we defend the claim that TA-markers have the syntactic properties we attribute to RPs by examining the range of specific interpretational contributions they can make to the overall predication complex. It will be seen that the set of TA-markers overwhelmingly carries semantics associated with high-argument introducing predicates cross-linguistically---in particular, the semantics of causatives and Applicatives.

2.3.6 TA as a head-marking DAS pattern: morphosyntactic evidence

Two morphosyntactic properties common to the whole set of TA-markers support the syntactic structure proposed in (29).

First of these is purely morphosyntactic. In surface morphology, the TA-marking element in a TA construction is always immediately left-adjacent to the LV. In (30), this collocation (what we have termed an affixal verb) is demarcated with braces as {...}:

(30) {TA-marker.LV} structure (= {RP.LV})

- | | | |
|----|----------------------------------|------------------------------------|
| a. | nəkəlápilα | nə-kəl-api{l.α}-[w] |
| | 'I tie NA, tie NA up, tether NA' | 1-fixed-tie{ <u>TA.DIR</u> }-W |
| b. | nəpısənα | nə-pis-{ən.α}-[w] |
| | 'I insert NA [by hand]' | 1-into-{ <u>by_hand_TA.DIR</u> }-W |

In other words, the general head-final character of Penobscot stem structure predicts precisely this {RP.LV} pattern as the surface outcome of a [v[RP[...]]] syntax. Or rather, this is the prediction if we assume a direct syntax-to-surface-morphology mapping along the lines of Baker 1988's Mirror Principle:

(31) The Mirror Principle (Baker 1988:13)

Morphological derivations must directly reflect syntactic derivations (and vice versa).

To make any claims about syntax from observations about morphology, we need a syntax-to-morphology mapping. The Mirror Principle is a minimal claim, and admittedly one prone to overgeneration. However, in this particular case of Algonquian verbal morphology, we simply find no need for a more complex model (say, a templatic one): i.e. neither surface evidence of intermediate syntactic material, nor interpretational evidence of a reverse or mediated set of hierarchical relations has come to light, let alone any reason to suspect morphophonological

reordering effects (these being the usual cited cause of exceptions to the the Mirror Principle).

In this light, the Mirror Principle analysis stands (for now, at least) in support of the proposed structure in (29), being the simplest uncontradicted claim.

The second line of support is purely syntactic.

Evidence from Ojibwa (32) suggests that the Primary Object (again, the argument consistently associated with the TA-marking element and matching LVs) evidently c-commands other internal arguments, i.e. any Secondary Object (= the ditransitive Theme; see §2.4.2-5).

(32) Primary Object c-commands Secondary Object (Rhodes 2002:(7), 1991:(27))

Ngii-mkamwaa kiwenziinh niw wgwisan.

ni-gii-mak-amaw-aa	akiwenziinh
1SUBJ-PAST-find-BEN-3AN OBJ	old man _i

niw	o-gwis-an
that _j -OBV	3POSS _i -son _j -OBV

- a. 'I found the old man_i's son_j for him_i.'
- b. * 'I found the old man_i for his_i son_j.'

Rhodes actually attributes these effects to his Possessor Constraint (discussed in §4.2.5). We offer a less language-specific explanation. Algonquian ditransitives lack an obvious overt adposition: this makes them (in surface form at least) more akin to double object constructions than to adpositional ditransitives. We therefore suggest that the syntax involved is effectively that of the corresponding English double-object versions of the glosses of (32a,b), namely (33).

(33) English double-object glossing alternatives

- a. 'I found the old man_i his_i son_j.'
- b. ?* 'I found his_i son_j the old man_i.'

It is not obvious exactly why the English example in (33b) is so ill-formed, but, assuming that we can treat the Algonquian ditransitive as a double-object construction, it does make clear that (32b)'s ungrammaticality requires no language-specific explanation.

Now if it holds true that the RP-associated argument c-commands any other internal argument (or at least the Secondary Object argument), then this situation is captured quite straightforwardly by the structure in (29), since that the RP-associated argument is the highest non-external argument.

Note however, that unlike most accounts offered for double object constructions (e.g. Harley 2002, Larson 1988) and Applicatives (Rackowski and Richards 2005, Pylkkänen 2002, 2001), I make no more specific claim here as to the structural position of the Secondary Object, beyond limiting it to the VP level: there it may be introduced as a specifier or as complement, or perhaps even as a VP-level adjunct; see §2.4.2-5 for more discussion.

These are the two main points of general morphosyntactic evidence in favor of the syntactic structure for TA constructions proposed in (29). We now move on to individual examination of the semantic properties of TA-markers, and show how they match those commonly associated with high argument-introducing predicates.

2.3.7 TA as a head-marking DAS system: interpretational evidence for TA-markers
as Relational Predicates

2.3.7.1 Overview

In this section we examine the interpretational evidence for the claim that TA-markers are structurally high argument-introducing heads, that is, Relational Predicates. We examine from their semantic contributions whether these elements can be characterized as Applicatives, causatives, or comparably "high" (i.e. above the lexical V and its associated Theme) argument-introducing predicates.

This is indeed what we find. The core TA-markers include not only explicit Applicatives and causatives (34a), but also instrumental, comitative, and directional Applicatives (34b), along with a set of elements that specify the particular kind of instrument mediating the action of the event (34c).

(34) Core TA-markers (= Relational Predicates)

- | | | | |
|----|----------------------------|------------------------|------------------------|
| a. | -(a)w.α, - ^o .α | explicit Applicatives | (GIVE TO, TAKE FROM) |
| | -(ə/a)l.α | causative/Applicative | (CAUSE) |
| b. | -(α)m.α | 'DO to, with NA' | |
| | -(e)m.α | 'act in company of NA' | |
| | -am.α | 'act to(wards) NA' | |
| c. | -m.α | 'act on NA by voice' | (TELL) |
| | -am.α | 'act on NA by mouth' | (GRIP IN MOUTH, BITE) |
| | -ən.α | 'act on NA by hand' | (GRIP IN HAND, HANDLE) |

Note here that we cite each such element in its position within a whole affixal verb, i.e.

together with its associated light verb, here, the light verb *-α* 'DIR'.

These elements represent a rather rich range of functions; in (35) we give examples of each as they appear in actual full TA constructions.

(35) TA markers as high-argument-introducing predicates (RPs)

a. dative Applicative

nətakitámawα	nə-ak-m.t.am-aw.α-[w]
'I read it for NA'	1-count-by_voice.T.LV ^{NA} -RP.DIR-W

cf. nətákitam nə-ak-m.t.am-əp
'I count' 1-count-by_voice.T.LV^{NA}-P

nətákimα	nə-ak-m.α-[w]
'I count NA; I read NA (NA's intentions, ideas)'	1-count-by_voice.DIR-W

b. other adpositional Applicative

nókihke	nə-wək-əhk.e-əp
'I bark [howl, chatter, whoop...]'	1-bark-make.DO ^{NA} -P

nokíhkα	nə-wək-əhk.e-l.α-[w]
'I bark at NA' (cf. O'Meara 1990:72)	1-bark-make.DO ^{NA} -RP.DIR-W

c. causative

nəníwihalα

nə-niw-h-al.α-[w]

'I dry NA'

1-dry-shift-RP.DIR-W

d. causative-transitive

nəkəmotənα

nə-kəmot-ən.e-l.α-[w]

'I steal NA'

1-thieving-by_hand.DO^{NA}-RP.DIR-W

e. directional-Applicative

nəkəmotənαmα

nə-kəmot-ən.e-m.α-[w]

'I steal from NA'

1-thieving-by_hand.DO^{NA}-RP.DIR-W

f. instrument-naming high argument-introducing predicate

nətakéhkimα

nə-akehk-m.α-[w]

'I instruct NA, teach NA'

1-teach-by_voice.DIR-W

g. instrument-naming high argument-introducing predicate

nətəmamα

nə-təm-am.α-[w]

'I bite NA off'

1-sever(ed)-by_mouth.DIR-W

h. instrument-naming high argument-introducing predicate

nətəmənə

nə-təm-ən.ə-[w]

'I break NA in two, in half (by hand)'

1-sever(ed)-by_hand.DIR-W

The remainder of this section concerns itself with a close examination of each of these subtypes of Relational Predicate. We start in §2.3.7.2 with the Applicatives: these TA-markers have such an extensive range of subtypes (arguably accounting for the bulk of attested TA constructions) that they require an additional level of detail in discussion. Hence in §2.3.7.2 we discuss first the productive Applicatives (§2.3.7.2.1), and then the homophonous but closed-class Applicatives (§2.3.7.2.2), and then in a single section (§2.3.7.3) treat the remaining TA-markers, i.e. causatives and other high argument-introducing predicates with richer semantics.

Before moving on, it should be noted that the elements in (34) are the "core" TA markers; they often form collocations with further (often lexicalized) complement material. These are what Algonquianists standardly recognize as the lexical elements known as "TA Finals" (see (47) for examples). The elements in (34) are, however, uniformly viewed as the crucial TA-forming subelements of TA Finals (Rhodes 1980), since the further material in these Finals is generally also shared with corresponding TIs and often even with intransitive stems as well.

2.3.7.2 Applicatives

Quite probably the most striking piece of evidence for the DAS analysis of TA elements is that the uncontroversial productive Applicative is strictly a TA-marker, and that there is no corresponding Applicative TI, i.e. no TI+O to match the TA+O that the productive Applicative creates. The DAS analysis naturally expects Applicatives, as RPs par excellence, to be the canonical instances of TA constructions; at the same time it provides no active motivation for an Applicative taking a NI-class Goal.

Equally striking is that the productive Applicative does not add the "+O" argument of the TA+O---this being the Theme, the Secondary Object---but instead adds the Goal argument, which takes a DIR light verb identical to that found with the regular [+NA] notional direct object of monotransitive TAs; this is the core DAS effect discussed in §2.3.2. This is no great surprise, however, if TA-markers (unlike their supposed stem-agreement equivalents, TI-markers) as a general class realize the same basic configurational structure as High Applicatives.

In some cases, then, the RP forming a TA construction actually is a High Applicative. Specifically, a set of stems in *-(a)w* accounts for a large portion of TAs, and ranges from productive (High) Applicatives (36a) to a closed-class set with Applicative-like properties (36b), (36c).

We note here at the outset that the *-w* allomorph of *-(a)w* is overt after a consonant in some Algonquian languages only: in Penobscot it manifests only as rounding of certain following weak vowels to /o/. For this reason, such *-w* elements are hereafter given as diacritic *-^o*.

(36) Applicative TA-markers in *-(a)w*

a.	nətakítamaw ^o	nə-ak-m.t.am-aw.α-[w]
	'I read it for NA'	1-count-by_voice.T.LV ^{NA} -RP.DIR-W
	nətákimα	nə-ak-m.α-[w]
	'I count NA; I read NA (NA's intentions, ideas)'	1-count-by_voice.DIR-W
	nətákitam	nə-ak-m.t.am-əp
	'I count'	1-count-by_voice.T.LV ^{NA} -P

- b. -n-aw.α 'do to NA by viewing, view NA as...'
 -n.am 'do [to NI] by viewing, view [NI] as...'

nólinawα nə-wəl-n-aw.α-[w]
 'I like NA's looks; I like NA's behavior; 1-good-view-RP.DIR-W
 I approve of NA'

nólinamən nə-wəl-n.am-əne
 'I admire NI [like the looks of NI]' 1-good-view.LV^{NA}-N

- c. -əs-^o.α 'do to NA by heat'
 -əs.əm 'do [to NI] by heat'

nəpəkíhkəsα nə-pəkíhk-əs-^o.α-[w]
 'I scorch NA, bake NA' 1-scorched-by_heat-RP.DIR-W

nəpəkíhkəsəmən nə-pəkíhk-əs.əm-əne
 'I scorch NI, bake NI' 1-scorched-by_heat.LV^{NA}-N

We will first examine these three basic types of Applicative in detail in this order, and then review their common features.

2.3.7.2.1 Applicative TA-markers in -(a)w: productive

First of these is the productive Applicative in -(a)w. Its use in benefactives (37a), malefatives

(37b), and Possessor-raising patterns (37c) makes its status as an Applicative relatively uncontroversial---and indeed, cognate elements in other Algonquian languages have been treated as such in the substantial literature thereon (Bruening 2004, Junker 2003, Brittain 2001c).

(37) Applicatives (productive): Benefactive/malefactive/Possessor-raising TA Finals in -(a)w

- a. nətakitámawα nə-ak-m.t.am-aw.α-[w]
 'I read it for NA' 1-count-by_voice.T.LV^{NA}-RP.DIR-W
- nətákimα nə-ak-m.α-[w]
 'I count NA; I read NA 1-count-by_voice.DIR-W
 (NA's intentions, ideas)'
- nətákitam nə-ak-m.t.am-əp
 'I count' 1-count-by_voice.T.LV^{NA}-P
- b. wəkəmotənəmáwαnal. wə-kəmot-ən.əm-aw.α-əne-al
 'He steals him from him' (S:60:44:#146) 3-thievingly-by_hand.LV^{NA}-RP.DIR-N-obv
- nəkəmotənəmən nə-kəmot-ən.əm-əne
 'I steal NI' (PD:190) 1-thievingly-by_hand.LV^{NA}-RP.DIR-N
- c. wəkəmotənəmáwαnal, wətémisal.
 wə-kəmot-ən.əm-aw.α-əne-al wə-em-s-al

3-thievingly-by_hand.LV^{NA}-RP.DIR-N-obv 3-dog-DIM-obv

'He steals his dog [CQ: lit. 'he steals his dog from him']' (S:60:44:#146a)

d. na sàkəmə, wətahsamáwənal wətémisal.

na sàkəmə wə-ahs-am-aw.ə-əne-al wə-em-s-al
that^{NA} chief 3-feed-?RP-RP.DIR-N-obv 3-dog-DIM-obv

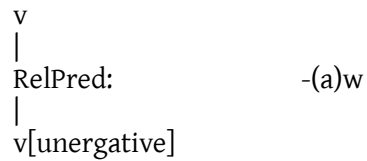
'The chief feeds the other one's dog' (S:60:24:#72)

Interestingly, these Applicatives are primarily formed from unergativized stems, i.e. from what are known as TI stems (see §2.4 for more discussion), rather than simply by tacking Applicative heads onto any kind of pre-existing transitive stem. That is, the *-aw* element collocating with the LV for the most part takes as its complement not another RP-derived structure, but instead usually an element independently found as a plain unergative LV (e.g. the *-am* in (37a), the *-əm* in (37b)). Why structural detransitivization generally has to take place to add an argument is not clear, but likely has something to do with the nature of Secondary Objects.

Rare exceptions to this pattern do exist: in (37d), the *-am* element here is evidently an RP (see (34)), and not a LV. This is unexplained, though it is of course striking that the RP *-am* element is homophonous with the unergative LV in *-am*.

The overall pattern of a productive Applicative with the structure in (38)

(38) Penobscot productive Applicative syntax



not only explains why productive Applicatives are all TAs--the RP.LV structure is the same as in any TA construction--but also offers an insight into the other primary/productive exponent of Applicative in $-(a)w$: the rather common benefactive/malefactive TA Final in $-ew$ (39).

We analyze a case like (39) as an instance of the derivation of a TA (39b) off of an unergative intransitive in $-e$ 'DO' (39a). Maintaining the structure given in (38), we can explain the resulting $-ew$ simply as the postvocalic $-w$ allomorph of general Applicative $-(a)w$, appearing after a vowel-final element $-e$, which is taken to be the familiar NA-taking LV 'DO' (see 3).

(39) Applicative $-(a)w$: postvocalic allomorph $-w$

a.	álohke	alohk.e-[w]
	'NA works'	work.DO ^{NA} -W
	nətálohke	nə-alohk.e-əp
	'I...'	1-work.DO ^{NA} -P
b.	nətalóhkewα	nə-alohk.e-(a)w.α-[w]
	'I work for NA'	1-work.DO ^{NA} -RP.DIR-W

Such pairs form the most common attestation of TA Finals in $-ew$, and have a straightforward mapping of form to interpretation: adding an argument to a 'DO' predicate in $-e$ via an

Applicative in $-(a)w$, that is, from 'DO' to 'DO for X'. In other words, as unergatives, the base intransitives are no different from the TI constructions from which are derived the Applicatives just discussed above.

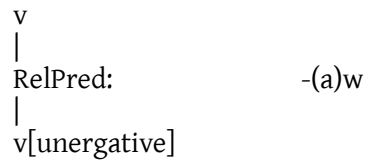
It should be noted, however, $-ew$ seems to have developed life of its own, appearing on stems without an original $-e$ LV:

(40) $-ew$ added to stems not in $-e$

- a. $\alpha nk\acute{a}w\alpha\check{c}\acute{a}m\omicron$ $\alpha nkaw-\alpha t-\acute{a}m.i-[w]$
 'NA repeats, retells, interprets' $add-report-by_voice.LV^{NA}-W$
- $n\acute{e}t\alpha nk\acute{a}w\alpha\check{c}\acute{a}m\omicron$ $n\acute{e}-\alpha nkaw-\alpha t-\acute{a}m.i-\acute{e}p$
 'I...!' $1-add-report-by_voice.LV^{NA}-P$
- b. $n\acute{e}t\alpha nkaw\alpha\check{c}\acute{a}m\acute{o}wew\alpha$
- $n\acute{e}-\alpha nkaw-\alpha t-\acute{a}m.i-w-.e-(a)w.\alpha-[w]$
 $1-add-report-by_voice.LV^{NA}-W-.DO^{NA}-RP.DIR-W$
- 'I speak in NA's behalf, interpret what NA says, act as NA's agent, I translate
 (a foreign language) for NA'

This aspect of LV-stacking is still insufficiently understood, though it reads naturally as some kind of required explicit unergativization. Furthermore, as noted above, the general transitive-derived benefactive affixal verb pattern is

(41) Transitive-derived benefactive syntax



that is, [[unergativized stem]-(a)w.α], where *-am* is an instance of an unergativized stem's LV (see §4.7). Now, given the forms in (37), we would expect that the Applicativization of 'buy', i.e. 'buy for [NA]' would give **manohəməw.α-*. But in fact we find *manohəməwew.α-*, as seen in (42c-e).

(42) *-aw-ew.α* for expected **-aw.α*

a. *nəmánəh^wα* *nə-manaw-ah-^o.α-[w]*
 'I buy NA' 1-buy-by_GenInstr-RP.DIR-W

b. *nəmánohəmən* *nə-manaw-ah.am-əne*
 'I buy, purchase NI' 1-buy-by_GenInstr.LV^{NA}-N

c. *nəmanohəməwewənəl*

nə-manaw-ah.am-aw.e-(a)w.α-[w]
 1-buy-by_GenInstr.LV^{NA}-RP.?DO^{NA}-RP.DIR-W

 'I buy NA for NA'

d. *məhč=əp=eht ni kkisi-manohəməwewi[n]?*

mehč=əp=eht ni

still=POT=UNC that^{NI}

kə-kis-manaw-ah.am-aw.e-(a)w.i-əp[əne]

2-able-buy-by_GenInstr.LV^{NA}-RP.?DO^{NA}-RP.LV¹-P[N]

'Could you buy me that?' (SDMC)

e. nəkisanohəməwəwən.

nə-kis-[m]anaw-ah.am-aw.e-(a)w.α-əne

1-PERF-buy-by_GenInstr.LV^{NA}-RP.?DO^{NA}-RP.DIR-N

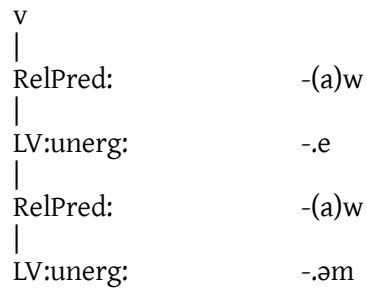
'I bought it for him (or her).'

 (SDMC)

To my knowledge, no Algonquianist work has offered an account for this evident doubling of Applicative elements.

On the one hand, this could be purely meaningless morphological doubling. On the other hand, a partial syntactic account is possible. Namely, that this *-e* element creates a second unergative DO-predicate (the first being *-əm*) off of the structure headed by *-(a)w*. And then off this a new Applicative in *-w* is built. In a sense, this is just a recapitulation of the pattern building the form in (37a), only the stem being unergativized has already gone through the process once before.

(43) Transitive-derived benefactive-Applicative syntax, iterated



This would parallel to the general account offered for *-am* in ditransitives; it also matches up with the observation that at the Proto-Algonquian level, plausible sources of Penobscot *-am* and *-e* are morphological alternants in Goddard 1967's reconstructed Proto-Algonquian TI paradigm. The interpretational motivations are less clear, however, and so we leave this as it is, observing that the light verb-based analysis has at least given us a foot in the door to addressing such concerns at all.

In spite of these particular quirks, then, we can still at least conclude from this data that *-(a)w* (and its stacked derivant, *-e-w*) do carry the typical semantic effects of Applicatives: benefactive/malefactive and Possessor-raising interpretations. This is the set of productive (High) Applicatives in *-(a)w*.

2.3.7.2.2 Applicatives in *-(a)w*: closed-class

An apparently closed class of TAs in *-(a)w* are what we may term TAs in "deleting" *-aw* and *-w*. This is because their derivational relationship with corresponding TIs involves a descriptive deletion of this crucial element. This is a feature unexplained by standard accounts; it comes out neatly from the present model.

Put simply, TA constructions, due to DAS, must have an RP (i.e. the *-(a)w*), while TIs need not: hence these TAs are derived with an RP, while the TIs are just minimal unergatives, affixal

verbs consisting of a light verb over bare lexical predicate elements (see §2.4.6 for more on the TI structure):

(44) Applicatives (closed-class): TAs in "deleting" -aw and -w

- a. -n-aw.α 'do to NA by viewing, view NA as...'
 -n.am 'do [to NI] by viewing, view [NI] as...'

nólinawα nə-wəl-n-aw.α-[w]
 'I like NA's looks; I like NA's behavior;
 I approve of NA' 1-good-view-RP.DIR-W

nólinamən nə-wəl-n.am-əne
 'I admire NI [like the looks of NI]' 1-good-view.LV^{NA}-N

- b. -əsət-aw.α 'do to NA by listening, hear NA as...'
 -əsət.am 'do [to NI] by listening, hear [NI] as...'

nəčĭksətawα nə-čĭk-əsət-aw.α-[w]
 'I listen to NA' 1-silent-listen-RP.DIR-W

nəčĭksətamən nə-čĭk-əsət.am-əne
 'I listen to NI' 1-silent-listen.LV^{NA}-N

- c. -əl-aw.α 'do to NA by projectile'
 -əl.am 'do [to NI] by projectile'

nətələməlakíhtelawα

nə-ələm-αlak-əhte-əl-aw.α-[w]

1-away-hole-striking-by_projectile-RP.DIR-W

'I make a hole in NA with a bullet or an arrow'

nətələməlakíhtelamən

nə-ələm-αlak-əhte-əl.am-əne

1-away-hole-striking-by_projectile.LV^{NA}-N

'I make a hole in NI with a bullet or an arrow'

- d. -əhk-aw.α 'do to NA by body'
-əhk.am 'do [to NI] by body'

nənóhsòhkawα

'I follow NA'

nə-nòhsaw-əhk-aw.α-[w]

1-follow-by_body-RP.DIR-W

nənóhsòhkamən

'I follow NI'

nə-nòhsaw-əhk.am-əne

1-follow-by_body.LV^{NA}-N

At first blush, it may not be obvious that this set of TAs represents Applicatives at all. Or at best they might seem to be nothing more than the result of bleaching of the Applicative RP into

nothing more than a plain transitivizer. But upon closer examination, we notice that this set is overwhelmingly characterized by transitive predicates involving what we might loosely call "distanced" or less immediate action on the internal argument. Namely, predicates of the kind that cross-linguistically commonly manifest with adposition-mediated object syntax (and this independent of DAS!): i.e. verbs of looking at (44a), listening to (44b), and shooting at (44c). In other words, prime candidates for basic argument-structural derivation via RP.

Even the *prima facie* counterexamples in (44d), which rather explicitly involve physical contact, are precisely of the least direct kind: the mediating instrument is not the hand or mouth, but un(der)specified bodily action. A closer look at three such collocations (44) confirms this.

(45) -aw 'distanced/less immediate action on internal argument (with contact)'

-əhk-aw 'act on [NA] by body'

-sk-aw 'kick [NA]'

-k^w-aw 'poke [NA]'

nəpehsótkawα

'I approach NA'

nə-pehsot-əhk-aw.α-[w]

1-near-by_body-RP.DIR-W

nətákskawα

'I kick NA'

nə-tak-əsk-aw.α-[w]

1-hit-by_kicking-RP.DIR-W

nək^wák^wikawα

'I push NA with a pole'

nə-k^wak^w-k^w-aw.α-[w]

1-rapid_force-by_elongated_instrm-RP.DIR-W

Drawing a distinction between the two "most immediate" (read: finely controllable) natural

body-tools, i.e. the hands and mouth, versus all others, here we can utilize Rhodes 1980's characterization of the Ojibwa cognate to Penobscot *-əhk-aw* as an "other" body-part-instrumental. That is, *-əhk-aw* indicates action by any body part except the (more immediate) mouth or hands. Same again for the more narrowly defined *-əsk-aw* 'by kicking' (note that *-əhk-aw* itself is underspecified enough to often appear in actions involving kicking or trampling). Concretely, the legs/feet are "less immediate" body-tools in that they are canonically less capable of fine manipulation, and are indeed physically distancing, being themselves elongated instruments.

The remaining explicit contact-action in *-aw* is *-k^w-aw* 'by elongated instrument'. Here again the canonical feature is a saliently distancing mediating tool, be it a pole, a needle (this element figures in verbs of sewing), or even a finger used as a poking instrument. Compare O'Meara 1990:75's characterization of a similar element in Munsee (albeit one not taking *-aw*) as 'by contact with elongated object': if any instrument might be construed as implicitly involving action at a distance, this would be it.

In sum, the particular semantic range these forms occupy suggests that they instantiate a kind of Applicative, albeit one much more narrow and lexicalized than the productive Applicative, this feature being reflected in their evidently closed-class status.

A seemingly stronger example of complete bleaching of Applicatives to their basic transitive argument-introducing function may be the set in *-^o*, as this seems to be one of purely instrument-naming transitives (46).

(46) "Deleting" (narrow) TA Final *-^o* for TI

- | | | |
|----|---------------------------|----------------------|
| a. | <i>-əs-^o.α</i> | 'do to NA by heat' |
| | <i>-əs.əṃ</i> | 'do [to NI] by heat' |

nəpəkɪhkəsɑ	nə-pəkɪhk-əs- ^o .ɑ-[w]
'I scorch NA, bake NA'	1-scorched-by_heat-RP.DIR-W

nəpəkɪhkəsəmən	nə-pəkɪhk-əs.əm-əne
'I scorch NI, bake NI'	1-scorched-by_heat.LV ^{NA} -N

- b. -əs-^o.ɑ 'do to NA by blade'
 -əs.əm 'do [to NI] by blade'

nətələsɑ	nə-əl-əs- ^o .ɑ-[w]
'I cut NA [with a knife]'	1-Xmanner-by_blade-RP.DIR-W

nətələsəmən	nə-əl-əs.əm-əne
'I cut NI'	1-Xmanner-by_blade.LV ^{NA} -N

- c. -ah-^o.ɑ 'do to NA by general instrument'
 -ah.am 'do [to NI] by general instrument'

nətáwɪhkhɑ	nə-awɪhk-ah- ^o .ɑ-[w]
'I inscribe, mark, draw NA'	1-marked-by_GenInstr-RP.DIR-W

nətáwɪhkhamən	nə-awɪhk-ah.am-əne
'I inscribe, write, mark, draw NI'	1-marked-by_GenInstr.LV ^{NA} -N

We could of course conjure up Applicative possibilities via adposition-glossed interpretations like

'apply heat to', 'apply tool to', and so forth. And this may well be their etymology. But the basic transitivity of adpositions means that a transitive expression can almost always be paraphrased with an adposition. While this may ultimately be the key notion behind an overall account for transitivity, alone it only makes the argument circular.

A stronger argument can be made, however. Note that here too we can again readily segment out the instrument-naming morphology; *-as* 'heat', *-as* 'blade' (these two are homophones by recent sound change), and *-ah* 'general instrument'. This set thus actually has the same morphological structure as the sets in (44) and (45), matching the same type of "non-primary" mediating instrument interpretation, in this case, purely artificial instruments like heat, cutting edges, or other tools. This compositionality is quite striking in its contrast to the unanalyzability of TA-markers carrying "primary" instrument-naming semantics (see (52), in the next section). This morphological distinction has to be stipulated in the standard analysis; it comes readily from an RP-based approach, whose compositional syntax almost literally iconically reflects the "mediating instrument" semantics: "primary" instrument-naming predicates are self-derived; "non-primary" are derived via adding a separate Applicative RP. While the motivation for this semantics-to-morphology mapping does not fall out of the RP analysis itself, it sets up a syntax that makes such a configurations a ready possibility.

The treatment of these last two categories of TA-marker reflects a non-standard view: traditional Algonquianist treatment has never commented on the morphophonological similarity of TA-markers in "deleting" *-(a)w* and the Applicative in *-(a)w*. Hence the RP elements that here are analyzed as fully separate morphemes in (47) are simply taken as characteristic TA-markers, i.e. with an implicit morphological segmentation, but one imbued only with a formal status, and no meaningful function in the TA "Final" of which they form the terminal part (O'Meara 1990:66 is an exception, but he too does not relate the *-^o* and *-aw* elements to each other).

(47) TA Finals derived with T-marker $-(a)w \sim -^{\circ}$

- a.
- | | |
|----------|---|
| -əl-aw | 'shoot projectile at [NA]' |
| -n-aw | 'see, view, look at [NA]' |
| -əsət-aw | 'hear, listen to [NA]' |
| -əht-aw | 'perceive [NA] by hearing' (unproductive) |
| -ht-aw | 'act in regard to, towards [NA]' |
| -tot-aw | 'position self with regard to [NA]' |
- b.
- | | |
|-------------------|---|
| -əs- ^o | 'act on [NA] by heat' |
| -əs- ^o | 'act on [NA] by blade/knife' |
| -ah- ^o | 'act on [NA] by instrument' |
| -h- ^o | 'have causal effect on [NA], make [NA]' |

There is, however, precedent within this tradition for just this very view. Algonquianist analysis already recognizes further collecting of lexical elements ("pre-Finals") with simple Finals in (47), to form complex Finals:

(48) TA complex Finals with traditional "pre-Finals" (after Rhodes 1980)

-ahkase-əs-^o 'act on [NA] by burning'

nəmehtkásesα

nə-meht-ahkase-əs-^o.α-[w]

'I burn NA, I burn NA up' (PD:267)

1-exhausted-burn-by_heat-RP.DIR-W

-əhte-əl-aw 'strike at [NA] with projectile'

nəmántelawα nə-man-əhte-əl-aw.α-[w]

'I shoot NA off (by arrow or bullet)' 1-removed-striking-by_projectile-RP.DIR-W

The present analysis achieves a simpler system by taking the original TA Finals themselves as having that same kind of internal structure, i.e. being composed of TA-markers with lexical complement material stacked under them.

The difference in surface morphology between the forms in (47a) and (47b), i.e. between *-aw* and *-^o* has no certain explanation, beyond perhaps attributing it to historical prosodic effects (weak vowel deletion), and hence it is chalked up to morphophonology for synchronic purposes. Though this seems not to have been discussed in previous work, both sets have a plausible association in form with the *-(a)w* of the explicit Applicative, and in interpretation fit the semantic pattern of lexical (= closed-class) Applicatives. I cannot yet determine for certain if the chain of related *-(a)w* elements comes from diachronic extension or synchronic macroreferentiality. No matter which account is true, their synchronic form and function fits the basic criteria characterizing Applicative elements, and hence also RP status.

2.3.7.3 Other Relational Predicates

Not all RPs are surface-obvious Applicatives, however, or even Applicatives at all. Recall the overall set of subtypes of TA-markers listed in (34), repeated here as (49).

(49) Core TA-markers (Relational Predicates)

a. *-(a)w.α, -^o.α* explicit Applicatives (GIVE TO, TAKE FROM)

	-(ə/a)l.α	causative/Applicative	(CAUSE)
b.	-(α)m.α	'DO to, with NA'	
	-(e)m.α	'act in company of NA'	
	-am.α	'act to(wards) NA'	
c.	-m.α	'act on NA by voice'	(TELL)
	-am.α	'act on NA by mouth'	(GRIP IN MOUTH, BITE)
	-ən.α	'act on NA by hand'	(GRIP IN HAND, HANDLE)

The remaining set of Core TA-markers often gloss as argument-introducing adpositions (50), as causatives (51), or as pure manipulating-instrument-naming predicates (52). Strict distinctions between these subclasses are not clear, and probably need not be made (cf. Rhodes 1976:255).

(50) Core TA-markers: adposition-suggesting glosses

a.	nókihke	nə-wək-əhk.e-əp
	'I bark [howl, chatter, whoop...]'	1-bark-make.DO ^{NA} -P
	nokíhkα	nə-wək-əhk.e-l.α-[w]
	'I bark at NA' (cf. O'Meara 1990:72)	1-bark-make.DO ^{NA} -RP.DIR-W
b.	nətə̀lapi	nə-əl-αp.i-əp
	'I look' (PD:39)	1-thus-look.LV ^{NA} -P
	nətələ́pamα	nə-əl-αp-am.α-[w]

'I look at NA' (PD:154) 1-thus-look-RP.DIR-W

- c. nənək^wətəlakík^wahəsi nə-nək^wət-əlak-k^w.α-W-has.i-əp
'I wink' 1-one-hole-face.LV^{NA}-W-sudden.LV^{NA}-P

nənək^wətəlakík^wahəsəwəmək^w

nə-nək^wət-əlak-k^w.α-W-has.i-W-əm.ək^w-[w]

1-one-hole-face.LV^{NA}-W-sudden.LV^{NA}-W-RP.INV-W

'he winked at me' (SDMC)

- d. nisáhəyami nis-ahi(y).α-(w)-əm.i-ø
'play with me' (SDMC) two-play.LV^{NA}-(W)-RP.LV¹-2sImpr

- e. nəkəmotəne nə-kəmot-ən.e-[w]
'I steal' 1-steal-by_hand. LV^{NA}-W

nəkəmotənαmə nə-kəmot-ən.e-(w)-əm.α-[w]

'I steal from NA' 1-steal-by_hand. LV^{NA}-(W)-RP.DIR-W

- (51) Core TA-markers: causatives in -(ə)l.α

-h-αl.α 'shift, change, transform NA'

-hpo-l.α 'oscillate NA'

- | | | |
|----|--|--|
| a. | nəníwihalα
'I dry NA' | nə-niw-h-al.α-[w]
1-dry-shift-RP.DIR-W |
| b. | nətasopíhpolα
'I smooth, abrade, polish NA' | nə-asop-hpo-l.α-[w]
1-smooth-oscillate-RP.DIR-W |

(52) Core TA-markers: instrument-naming predicates

- | | |
|-------|----------------------|
| -m.α | 'act on NA by voice' |
| -am.α | 'act on NA by mouth' |
| -ən.α | 'act on NA by hand' |

- | | | |
|----|--|---|
| a. | nətakéhkimα
'I instruct NA, teach NA' | nə-akehk-m.α-[w]
1-teach-by_voice.DIR-W |
| b. | nətəmamα
'I bite NA off' | nə-təm-am.α-[w]
1-sever(ed)-by_mouth.DIR-W |
| c. | nətəmənα
'I break NA in two, in half (by hand)' | nə-təm-ən.α-[w]
1-sever(ed)-by_hand.DIR-W |

Of course, once again, all of these elements could be left as nothing more than pure transitivizers. But such an approach would leave unexplained why they are strictly associated with [+NA] Primary Objects only: this would return us to the agreeing-transitivizer analysis. It would also leave unexplained why some elements in the same position as "pure transitivizers" are particularly semantically rich, e.g. elements like those in (52), and particular, cases such as (53), where the choice of otherwise often vaguely distinguishable TA markers makes a

significant interpretational contrast.

- (53) Interpretational contrast from TA-marker (PD:190)
- a. nəkəmotənαα nə-kəmot-ən.e-l.α-[w]
 'I steal NA' 1-thieving-by_hand.DO^{NA}-RP.DIR-W
- b. nəkəmotənαα nə-kəmot-ən.e-m.α-[w]
 'I steal from NA' 1-thieving-by_hand.DO^{NA}-RP.DIR-W

The particularly telling observation is the range of kinds of interpretational contributions these elements make; they are rather constrained to those familiar from high argument-introducing predicates. Here, for example, they evidently contribute directional and affectedness semantics of the kind commonly associated with Applicatives.

This latter point suggests that what "pure transitivizers" are found---i.e. ones without such clear semantic contributions---are better characterized as bleaching/idiomaticization from the basic, richer set of structurally high argument-introducing predicates. Such bleaching and idiomaticizations are expected for any recurrent syntactic pattern involving functional elements that contain some lexicosemantic richness: compare the (not unrelated) idiomatic use of adpositions in complements of verbs in Indo-European languages.

Taking this view is preferable to an oversimplified reverse: characterizing TA-markers as nothing but transitivizers misses these relations, and again, cannot account for the syntactic DAS effect, i.e. that ditransitive Goals and regular monotransitive [+NA] notional direct objects appear to have the same syntax.

What matters most, then, is the claim that TA-markers are high argument-introducing predicates, and not a claim that all TA-markers need be Applicatives or even bleached

Applicatives. We predict and have shown that (High) Applicatives are a significant and consistent type of TA-marker, but the crucial property for TA-marker status, i.e. what satisfies the DAS requirement, appears to be nothing more than an ability to introduce an argument in a particular structurally high position, i.e. immediately below the LV and above the remainder of the complex predication.

Elements other than Applicatives, then, may serve as TA-markers, so long as they have the same structural properties. We can see this in the striking similarity of the rich instrument-naming semantics of the RPs in (52) to those found in verb-serialization languages. Compare these with examples of instrumental verb serialization in White Hmong (54).

(54) White Hmong instrumental verb serialization (Jaisser 1995:149)

a. Nws tau xuas yuam sij qhib qhov rooj lawm.

s/he attain grasp key open door perf

'S/he opened the door with a key.'

b. Nws tau muab yuam sij qhib qhov rooj lawm.

s/he attain take key open door perf

'S/he opened the door with a key.'

c. Nws tau siv yuam sij qhib qhov rooj lawm.

s/he attain use key open door perf

'S/he opened the door with a key.'

Here we take a significant risk and assume that the linear order of the serializing elements actually reflects syntactic scope, such that these various 'handling' verbs, *xuas* 'grasp', *muab* 'take', and *siv* 'use' introduce their notional direct object in a high position, above the lexical

verb. Should this be so, then the instrument-naming RPs in (52) immediately fall into place as still another type of high argument-introducing predicate.

This is the only risky assumption we have to make, however. We expect that the properties of instrumental verb serialization will still be otherwise distinguishably from instrument-naming RPs, due to the more independent phonological status of the former, and possible additional functional material. That is, taking the line of Borer 2005b, that the same listeme can be inserted (or move) into a variety of fixed (but regularly derived) syntactic structures, we naturally derive the effect that a free verb and a serialized/functional verb may have substantial semantic overlap and identical phonological form, but occupy different syntactic statuses.

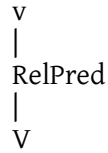
Looping this notion back to the proposed RPs in (34), we can claim that they are simply the head-incorporational versions of East/Southeast Asian-area instrumental verb serializations like these and others seen in White Hmong (and likely too the source of the familiar Mandarin *bǎ*-construction).

One problem presents itself. While there is a rich literature of tests for verbal-adpositional distinctions in serialization, these hinge primarily on their morphosyntactic (and morphophonological) separability, allowing tense and coordination tests, among others. These are obviously not available in constructions consisting entirely of morphophonologically bound heads.

Assuming, however, that these elements are incorporated directly as Root elements, rather than by movement---contra Baker 1988, but as per Borer 2005 and Marantz 1997---then in this kind of syntax the difference between instrument-naming verbal elements and adpositional elements may be essentially none, since since the typical properties distinguishing verb from adposition derive from their higher functional projections. Which are absent here.

Thus if the surface word order of the White Hmong forms is any indication of c-command relations, then the main-spine head-structure for these forms is identical to that claimed for Algonquian RPs in construction, i.e. (55),

(55) TA syntax



with the only difference being the treatment of the arguments of these heads. That is, White Hmong, being again a primarily dependent-marking VO language, keeps its arguments immediately following each serial head. The semantically similar elements in Penobscot, by dint of morphophonology, do not, but still retain evidence of a comparable head-syntax in their surface-morphological ordering relative to the other bound elements of the complex predication. That is, they show the same surface-morphological intermediate position between LV and remaining stem material: the direct Mirror Principle-based match of the structure in (55).

A comparable analysis has been proposed by Mithun 2001:94-95 for the diachronic origins of Applicatives in the near-neighboring Northern Iroquoian languages: she identifies these as Verb-Verb compounds. Specifically, the set she so identifies includes dative/benefactive Applicatives, instrumental Applicatives, and directional Applicatives). These are matched by Penobscot RPs: consider respectively dative/benefactives in (34a), instrumentals in (34b) and (35h), and directionals in (35e). Mithun then demonstrates the derivation of two dative/benefactive Applicatives from old verbal roots meaning 'lend' and 'give', along with two instrumental Applicatives, one arising from a root in 'pick up', and another in 'use'.

Northern Iroquoian thus offers an established example of a development from argument-structural complex predication syntax (with an analytical morphology reminiscent of typologically isolating White Hmong) to a head-marking system where those same argument-introducing predicates appear as bound verbal morphology. In fact, there is some

suggestive indication that comparable etymologies underlie the Algonquian RPs. For example, one Penobscot RP in *-l* (there are two; this one reflects PA **-l*, as opposed to another that reflects PA **θ* or **t-l*) does have a straightforward etymology from the Root *mil-* 'give to [NA]', seen in (56),

(56) Root *mil-* 'give to [NA]'

nəmílɔnal nətémisal	nə-m-l.ɔ-əne-al	nə-em-s-al
'I give NA my dog' (PD:280)	1-give-RP.DIR-N-obv	1-dog-DIM-obv

As briefly noted in §2.3.3, there is a general Proto-Algonquian (and subsequent) process of lexical affix formation by deletion of a Root-initial consonant (Wolfart 1973:64, Bloomfield 1947); this would delete the initial **m-*, leaving **(i)l*. The vowel here is parenthesized because it happens to be the morphological epenthetic across the family (Bloomfield 1947): whether it is so in the original root (i.e. epenthesizing **m-l-*) or not, it would be subject to an alternation between *-il* and *-l*, which is precisely what the TA-marker *-l* does. This RP is rather vague in its identifiable semantics, but seems mostly associated with Applicative and causative functions. These in turn are both quite common uses of argument-structural serial verbs originating as 'give' (see especially Thai and Khmer, among many other examples).

A further possible example is one comparable to the Northern Iroquoian 'pick up' developing into an instrumental Applicative. This is the instrument-naming RP *-ən* 'by hand', which is unique as a TA-marker in that it has an identical form when appearing in TI constructions. This is not unexpected if it indeed started out as an element meaning 'pick up' or 'hold'; see §2.4.5 for extensive discussion of its secondary development as part of an Instrumental Applicative.

These etymologies are provisional at best---e.g. it is still difficult to disprove the argument that *mil-* is not simply derived with an RP in *-l* in the first place---but they underline

the plausibility of the TA-markers originating as syntactically high, semi-lexical argument-introducing predicates. In other words, the syntax suggested in (29) above.

2.3.8 Summary and transition

The first half of this chapter has concerned itself with the claim that Algonquian TA constructions are not instances of stem-agreement, but instead have as their basic syntax a high argument-introducing head as the head-marking equivalent to an adposition/case-marker, which satisfies the DAS requirement triggered by a [+NA] feature on a Primary Object. The TA-marker was identified as this element.

We now turn to the predictions the DAS-based model of the TA-TI contrast makes for constructions paralleling TAs that take [-NA] notional direct objects. Namely, TIs.

2.4 TIs as antipassives, and TA~TI derivational relations clarified

2.4.1 Antipassives

Recall that the first--and in essence only--claim of this account is that [+NA] notional direct objects generally trigger DAS, which in turn manifests as Relational Predicate morphosyntax. No comparable constraint is claimed for the treatment of [-NA] notional direct objects.

This absence of a strict constraint in fact derives the second major claim of this chapter, that TI constructions are antipassives, from the first.

This is because two predictions come out of the less-constrained nature of TI constructions. First, because TI constructions require no specific obligatory internal-argument-introducing element like a Relational Predicate, the minimal assumption is that TIs consist only of a light verb stacked over a complex predication that does not introduce any internal argument, since this is all that is required of a verbal construction by the light-verb

model laid out in §2.2.1.

This view predicts that TIs to be intransitive in their LV syntax. That is, assuming that their LV introduces the external argument (i.e. the Agent), this leaves no internal argument-introducing head, no means to introduce (or at least visibly license) their notional direct object. The only syntactic strategy left to license such an argument is that of an oblique.

Two properties, then, are predicted for the non-DAS effective transitive (i.e. the TI, among others): (a) the morphosyntax of an intransitive, and (b) oblique introduction of its notional direct object.

These coincide exactly with the core morphosyntactic properties of antipassives, as seen in the following example from West Greenlandic.

(57) West Greenlandic antipassive (Bittner 1987:194)

- | | | |
|----|---------------------------|--|
| a. | Jaaku ujaqqamik tigisivuq | Jaaku ujarak-mik tigu-si-vu-q |
| | 'Jacob took stone.' | Jacob(A) stone-INS take-ap-intr.indic-3sgA |
| b. | Jaakup ujarak tiguaa | Jaaku-p ujarak tigu-a-a |
| | 'Jacob took stone.' | Jacob-E stone(A) take-tr.indic-3sgE/3sgA |

In the antipassive form (57a), contrasted against the regular transitive (57b), the relevant morphosyntax consists of two elements that "match" each other: the intransitivizing antipassive element *-si* on the verbal complex, and the corresponding Instrumental (here, the affix *-mik*), on the notional direct object.

To maintain our claim, we must therefore show for the TI construction comparable Instrumental/oblique morphology associated with the nominal, and comparable intransitive (or intransitivizing) morphology on the verbal complex.

The first of these requirements we demonstrate in §2.4.2-5. Here, once again, the basic

head-marking nature of Algonquian means that nominal-associated Instrumental status is more saliently found on the verbal complex, rather than on the overt nominals themselves.

Specifically, notional direct objects of TIs are indexed on the verbal complex using a morphological pattern shared with the decidedly Instrumental-like Secondary Objects (§2.4.2): N-Peripheral Marking. The nature of this N-Peripheral Marking is examined in detail, first in terms of its Algonquian-internal uses, which parallel the Instrumental *with* of English thematic transferees (§2.4.3), leading to the preliminary conclusion that N-Peripheral Marking is, if not purely an Instrumental marker, at least a kind of default morphology including said category. This view is then reinforced by a second string of striking parallels holding between the uses of N-Peripheral Marking and the disparate uses of the Chamorro Oblique; these are examined in §2.4.4. Finally an internal reconstruction of the origins of the N-element as a verbal element meaning 'hold(ing)' is offered in §2.4.5 as an example of a common grammaticalization cline from 'hold(ing)' to an Instrumental.

The second of these requirements is discussed in §2.4.6-8: that the TI stem-construction itself is not simply stem-agreement paralleling a TA, but instead is an unergative intransitive construction, a simple collocation of light verb over lexical material. The immediate result of this relative looseness is a striking contrast with TAs: a much less constrained set of distinct structures that can function as TI constructions. Hence in §2.4.6 we show that TI constructions manifest at least three distinct patterns with respect to their corresponding TAs. Then in §2.4.7 we observe that TI LVs exhibit a marked lexical diversity, a feature we expect, as it also reported for antipassives. Finally, in §2.4.8, we present the most damning evidence for TIs as antipassives, and against a view that they are simple agreement variants of TAs: many (perhaps all) TIs can drop their objects. This again is a feature commonly found in antipassives, and, as the RP-based model predicts, it is one that lacks a parallel in TA constructions.

2.4.2 N-Peripheral Marking: Secondary Objects (Instrumentals) and TI notional direct objects

A pattern of verbal argument-marking exists in Penobscot and other Eastern Algonquian languages which we may call *N-Peripheral Marking*. N-Peripheral Marking occurs only in the IdpIdc morphological clause-type; it is completely absent or non-contrastive in all others (e.g. the Conjunct, Imperative, and the Subordinative; see Ch. 4), such that what information it provides in the IdpIdc is left completely ambiguous in those forms.

The N-Peripheral Marking pattern itself consists of two "matching" elements. The verbal complex is marked with an N-element *-əne*. Then, where nonzero, Peripheral Ending morphology that matches the number/gender/obviation/absentativity status of the argument indexed via this N-Peripheral Marking collocation attaches to the terminal edge of the verbal complex.

(58) N-Peripheral Marking

wətalíhtonal ak^witənóhsisal

wə-ətal-h.t.aw-əne-al

ak^wit.ən-w-hs-s-al

3-Xplace-cause.T.LV^{NA}-N-NIpl

soak.LV^{NI}-W-AFF-DIM-NIpl

'he's making small canoes' (SDMC)

Here the N-morpheme attaches directly after the TI construction-complex *əliht.aw-* 'NA make [NI]'; the *-al* affix is NI plural, matching the gender and number (and, vacuously, obviation and absentativity) of the overt notional direct object, *ak^witənóhsisal* 'small canoes'.

What is striking about N-Peripheral Marking is that it is shared by three seemingly quite different kinds of arguments. First of these, of course, are the notional direct objects of TI constructions (59a). Second, and perhaps not so surprising (see below), is the use of N-

Peripheral Marking also to match the NI Agents of TA constructions (59b). Third, however, is quite interesting: N-Peripheral Marking also indexes what Algonquianists term *Secondary Objects* (Goddard 1979, Rhodes 1990b) (59b, c).

(59) TI internal arguments and Secondary Objects: N-Peripheral Marking

a. TI internal arguments

wətalíhtonal ak^witənóhsisal

wə-ətal-h.t.aw-əne-al

3-Xplace-cause.T.LV^{NA}-N-NIpl

ak^wit.ən-w-hs-s-al

soak.LV^{NI}-W-AFF-DIM-NIpl

'he's making small canoes' (SDMC)

b. [-NA] Agent acting on a [+NA] Primary Object (S:72:83)

wəníhləkon nəpison

'the medicine kills him'

wə-nəh-l.ək^w-əne

3-kill-RP.INV-N

nəpison

medicine

c. Secondary Objects: AI+O

nətehsíkəpawin iyo

'I am standing on this [NI]'

nə-tehs-kəpaw.i-əne

1-atop-stand.LV^{NA}-N

iyo

this^{NI}

nətehsíkəpawin owa

'I am standing on [this] NA'

nə-tehs-kəpaw.i-əne

1-atop-stand.LV^{NA}-N

owa

this^{NA}

d. Secondary objects: TA+O

nəmílǎnal nətémisal	nə-m-l.ǎ-əne-al	nə-em-s-al
'I give NA my dog' (PD:280)	1-give-RP.DIR-N-obv	1-dog-DIM-obv

We note immediately that all of these constructions have more than one argument: they are transitive configurations. There are also two constructions that involve what appears to be N-Peripheral Ending morphology, but at first blush do not appear to be transitive. These are marking of the Impersonal argument a ([+NA]) intransitive in the Idp clause-type (60a), and marking of the dependent clause-type paradigm known as the Subordinative (60b).

(60) N-Marking morphology: intransitive uses

a. Impersonal argument of intransitive (Idp clause-type)

mítsolətin	mit-Vhs.i-w-ələt.i-əne
'there is a feast, a feast is given, there	eat-?.LV ^{NA} -W-ExtPl.LV ^{NA} -N
tis eating by a group, it is time to eat' (PD:282)	

b. Subordinative clause-type

ni wətalətónkǎnǎ.

ni wə-ətal-əton-əhk.e-əne-əwǎw.
 that^{NI} 3-Xplace-mouth-make.DO^{NA}-N-≠1pl

'Then they talked.' (k. & t.#2:13)

We exclude both of these cases from subsequent discussion, for the following reasons.

Regarding (60a), the intransitive Impersonal is the only truly intransitive form utilizing the N-morpheme. However, it never attests Peripheral Ending morphology tracking itself as the N-marked argument. In principle this should mean that it could appear as the Agent of an AI+O, with Peripheral Ending morphology tracking the Secondary Object: the necessary examples have yet to surface. More tellingly, the Impersonal argument has a dedicated affix in the Conjunct clause-type (*-mək*), while other arguments associated with N-Peripheral Marking are simply not marked at all (see (63)). This use of the N-element therefore does not have the full features of the N-Peripheral Marking pattern. Furthermore, while all the other uses of the N-morpheme consistently appear attested in other Algonquian languages that have a fully contrastive N-element (i.e. Eastern Algonquian languages), the marking for the Impersonal argument of an intransitive often takes radically different and evidently unrelated forms across the family. This suggests that its realization via the N-morpheme in languages such as Penobscot is secondary, and is not indicative of the primary transitive uses.

The Subordinative use is not so much excluded as subsumed: Goddard 1983 argues that the Subordinative clause-type marking use of N-Peripheral Marking, even on intransitives, diachronically derives from a Secondary Object construction. We will assume that this is still the case, i.e. that Subordinative-marked clauses, even notionally intransitive ones, structurally and formally carry a Secondary Object, and so are simply a specialized instance of that type of transitive construction.

Returning to the main transitive cases of N-Peripheral Marking, then, we observe first that in terms of pure morphology, the treatment of NI arguments in transitive constructions---i.e. TI notional direct object arguments and NI Agents of TA constructions---is identical to that of Secondary Objects. This immediately raises the question of whether or not they are

syntactically identical.

2.4.3 Secondary Objects: a closer look

To answer that question, we must look more closely at Secondary Objects. The term has primarily been used descriptively, as the label for the notional direct objects of two kinds of transitive constructions, TA+O and AI+O (cf. especially LeSourd 1993, Rhodes 1990b, Goddard 1983).

The first of these, TA+Os are a simple category: these are ditransitives.

(61) Secondary objects: TA+O

nəmíłanal nətémisal	nə-m-l.α-əne-al	nə-em-s-al
'I give NA my dog' (PD:280)	1-give-RP.DIR-N-obv	1-dog-DIM-obv

This example should by now be a familiar illustration of the only ditransitive pattern available in Algonquian languages. The Goal (notional indirect object) argument---here the "NA" of the gloss---is the Primary Object, as indicated by its indexing via the DIR element. The Theme (notional direct object) argument is the Secondary Object, being indexed by N-Peripheral Marking, which here consists of the N-morpheme (-əne) along with the obviative singular Peripheral Ending -al that matches the overt nominal Secondary Object *nətémisal* 'my dog (obv)'. We refer the reader back to §2.3.6 for discussion of the syntactic properties of TA+Os that suggest them to have the basic syntax of double object constructions.

Stems of the AI+O type have not been discussed fully in this work. AI+Os are so named because their stem structure is morphologically that of the traditional Animate Intransitive (AI) category. That is, in form they look as if they belong to the set of intransitive verbs with one [+NA] argument. Specifically, in Algonquianist terms, they have AI Finals; in present terms,

they have plain NA light verbs and no RPs, rather than the special, primarily Patient-matching light verbs collocating with RPs that characterize TA constructions .

For an example, compare the intransitive AI stem *-əlalohk.e* 'work (thus)' (62a) and formally similar AI stem *-əlahk.e* 'throw (thus)' (62b):

(62) Animate Intransitive (AI) stems

- | | | |
|----|-----------------|-------------------------------------|
| a. | nətəlálóhke | nə-əl-əlohk.e-əp |
| | 'I work (thus)' | 1-Xmanner-work.DO ^{NA} -P |
| | | |
| b. | nətəlahke | nə-əl-əhk.e-əp |
| | 'I throw' | 1-Xmanner-throw.DO ^{NA} -P |

By either the present analysis or the traditional one, the two verbal stems in (62) are formally identical in their stem-final morphological structure. That is, either they share a LV in *-e* 'DO' (the present analysis), or they share the same purely formal AI Abstract Final (the most conservative traditional analysis; cf. Bloomfield 1962). The usage attestation in (62) shows that both phonetic forms are indeed compatible with intransitive syntax. Hence the traditional classification of both as Animate Intransitive stems.

AI+O stems are distinguished from plain AIs, however, in that they can take objects---hence the name. The AI stem *-əlahk.e* 'throw (thus)' in (62b) is also an AI+O stem. We see this in (63), where the very same stem is used with a [+NA] notional direct object *awəsikəwənal* 'his spear (obv)'

(63) AI+O stem *-əlahk.e* 'throw (thus)'

...nahč keti-álahket awəsíkəwənal, àhtəmə wəkisi-aláhkewənal.

ni=ahč [e]-katw-əl-əhk.e-t a-wəsikəwənal

then also C-irrealis-Xmanner-throw.DO^{NA}-3s.cj 3-spear-obv

ahtəmə wə-kis-əl-əhk.e-[w]-əne-al

not_at_all 3-able-Xmanner-throw.DO^{NA}-NEG-N-obv

'...then too as he wanted/tried to throw his spear, he could not throw it [CQ gloss]'

(kesihlət (GD version):18)

Here the form *wəkisi-aláhkewənal* 'he could [not] throw NA (obv)' shows the indexing of the Secondary Object argument (understood as *awəsíkəwənal* 'his spear (obv)', from the previous clause) via N-Peripheral Marking: again, the N-morpheme (*-əne*), along with the Peripheral Ending *-al* 'obviative'.

Conveniently, this example also demonstrates the absence of N-Peripheral Marking in a non-IdpIdc morphological clause-type. In that first clause, the Conjunct clause-type form *keti-álahket* 'as he wanted/tried to throw NA (obv)' is clearly taking Secondary Object *awəsíkəwənal* 'his spear (obv)' as its notional object argument, but there is no special Conjunct morphology indexing it as such (or even at all), just the usual Conjunct morphology associated with the 3rd person NA (Agent) argument: *-t*.

Secondary Objects are a highly constrained class of argument. That they have a relationship to Person-Case Constraint patterns is clear: they too are restricted to third persons only (Goddard 1979:37) and realize Themes of ditransitives. This clustering of properties suggest that Secondary Objecthood derives from not just from a simple lexical-selectional quirk of certain verb stems, but instead has a more directly syntactic motivation.

However, even though Secondary Objects are regularly the notional direct objects of ditransitives (TA+Os), the set of traditional "morphological intransitives" that take Secondary Objects, that is, AI+Os, is standardly taken to be purely lexical and unpredictable (Rhodes 1990b).

This is only partly true, however. While no formula for predicting AI+O status has been discovered, it is clear that what falls into the class of AI+O stems is not wholly arbitrary. In fact, these stems' Secondary Objects fall into two well-defined classes: transferee Themes, and locative Themes.

The first type, transferee Themes, we have seen in (63); a further example will be (67). This category is responsible for verbs of throwing, trading, giving, and so forth across the Algonquian family frequently being AI+Os.

The second type, locative Themes, is seen in forms such as in (64).

(64) Secondary Objects: AI+O

a.	nətehsíkəpawin iyo	nə-tehs-kəpaw.i-əne	iyo
	'I am standing on this [NI]'	1-atop-stand.LV ^{NA} -N	this ^{NI}
b.	nətehsíkəpawin owa	nə-tehs-kəpaw.i-əne	owa
	'I am standing on [this] NA'	1-atop-stand.LV ^{NA} -N	this ^{NA}

This latter type is less well-understood, particularly with regard to how it contrasts with constructions using actual Locative-marked nominals. (There is an intuition here that one can read the first type as the unergative and the second as the unaccusative versions of Secondary Object-taking predicates, but this view has yet to be developed sufficiently.)

A useful observation regarding AI+Os is that of Rhodes (p.c. 2006), who notes that many

can be read as detransitivizations of TA+Os, i.e. TA+Os stripped of their Goal argument. Within the present model, we can account for these forms rather simply, by treating them as pre-TA+O predications, i.e. the complex predication structure present before a Goal argument is introduced via an RP.LV complex, one which, through some still not understood means, licenses a Secondary Object.

This particular line of syntactic analysis nicely links the descriptive label "transferee Theme" to the Secondary Objects in ditransitives, since the notional object of a ditransitive is by definition always a transferee Theme. In this sense, at least, AI+O and TA+O Secondary Objects reduce to one pattern.

So what are Secondary Objects?

There is a lone but tantalizingly direct usage hint that Secondary Objects represent an Instrumental of some specific kind. That is, in (65a) the gloss of the Secondary Object's relation to the basic TA predicate---given in (65b)---using English *with* is difficult to account for unless we read it as some sort of Instrumental.

(65) Secondary Objects: some kind of Instrumental?

- | | | |
|----|----------------------------------|--------------------|
| a. | nətakámənal | nə-tak-am.α-əne-al |
| | 'I hit NA with NA(obv)' (PD:447) | 1-hit-RP.DIR-N-obv |
| b. | nətákamə | nə-tak-am.α-[w] |
| | 'I hit NA, strike NA' (PD:447) | 1-hit-RP.DIR-W |

Following this view, the general use of Secondary Objects as the notional direct objects of ditransitives would simply be an instance of an alternation also found in English (66), wherein *with*-Instrumentals can indicate a transferee Theme (66a), as against their syntacticization as formal direct objects in double object constructions (66b).

(66) English transferee Theme alternation (cf. Hale and Keyser 2002:160-161)

- a. I favor you with a gift.
I shower you with presents.
I load the truck with hay.
I present you with an award.
- b. I give you a gift (to your favor).
I shower presents upon you.
I load hay into the truck.
I present an award to you.

In other words, the form in (67)

(67) Ditransitives: an Instrumental *with*?

nəmɪlɑnəl nətémɪsəl	nə-m-l.ɑ-əne-əl	nə-em-s-əl
'I give NA my dog' (PD:280)	1-give-RP.DIR-N-obv	1-dog-DIM-obv

may more literally have the syntax of the somewhat odd but intelligible English *I gift him with my dog*.

This is the evidence that Secondary Objects are, if anything, some kind of Instrumental. Now given their identical morphological treatment, the obvious claim to make is that notional direct objects of TI constructions are simply Secondary Objects. There are a number of reasons not to jump directly to this conclusion.

First off, notional direct objects of TI constructions are, not surprisingly, evidently

restricted to [-NA] arguments only. Whereas Secondary Objects can be either [+NA] or [-NA], as seen in (64a) vs. (64b). This suggests, at first blush at least, that the two cannot be completely equated.

Secondly, Rhodes 1990 points out that notional direct objects of TI constructions can be "passivized" (more precisely, "agentless-passivized"), while Secondary Objects cannot. This he cites as one reason to treat [-NA] objects of TI constructions as Primary Objects (which as a class can be "passivized"), on the strength of Ojibwa examples comparable to the following Penobscot forms:

(68) "Passivization" of TIs in Penobscot

a. "Passive" TI

kátaso	kα-l.t.αs.i-[w]
'IN is hidden' (PD:176)	hide-RP.T.mdrflx.LV-W

b. "Active" TI

nəkaton	nə-kα-l.t.o-əne
'I hide IN' (PD:173)	1-hide-RP.T.LV ^{NA} -N

"Passivization" in Penobscot, as in most other Algonquian languages, is not an unambiguously inflectional process; nor is it even always a gender-specified one: compare (68a) to the forms discussed back in (10b). In fact, TI-"passivization" appears to involve no more and no less thematic morphology than ersatz "active" forms do. That is, the passive/Impersonal agent collocation involves just another agreeing light verb (here represented as *LVImps* and *DIR*,

according to which LV the pronominal feature configuration determines). This is a feature of TA constructions as well; hence corresponding "passive"- "active" alternations for TAs.

(69) "Passive"- "Active" alternation in TA morphology

a. "Passive" TA (awehsohsak:12)

tákamα	tak-am.α-[w]
'NA was [=is] hit'	hit-RP.DIR-W

b. "Active" TA (PD:447)

nətákamα	nə-tak-am.α-[w]
'I hit, strike NA'	1-hit-RP.DIR-W

c. "Passive" TA (S:70:10)

nətákaməke	nə-tak-am.ək.e-[əp]
'I am hit'	1-hit-RP.Imps.LV ^{NA} -P

In §4.4.2 we offer much more discussion of this crucial part of the overall analysis of Algonquian transitive morphosyntax. Again, we point out a crucial TA-TI asymmetry unexpected under a stem-agreement analysis: these "TA passive" forms evidently are used strictly with [+NA] arguments, whereas there is substantial evidence that Penobscot "TI passives" can in at least some instances be used with [+NA]s---see (10b) again---a state of affairs that makes sense if "TI passives" can have gender-underspecified LVs, whereas "TA passives" introduce a [+NA]

notional direct object via their RP and have a strictly [+NA] LV, thus excluding [-NA] arguments. Note too that in both constructions there is no morphological indication of anything other a substitution of light verbs: in other words, equal morphosyntactic complexity between "active" and "passive".

The chief problem with using "passivization" as a means to distinguish the notional direct objects of TIs from Secondary Objects is that it is not completely clear that AI+O stems can never passivize. Robert Leavitt (p.c., 2002) reports that the Passamaquoddy AI+O stem -*alahk.e*, cognate to the Penobscot AI+O stem -*alahk.e*- 'throw (thus)' discussed previously in (62) and (63), can "passivize" with medioreflexive -*as.i*, the cognate to Penobscot "TI passive" medioreflexive -*as.i*, thus giving:

(70) "TI passive" AI+O in Passamaquoddy

lahkaso	əl-ahk.as.i-[w]
'IN is thrown'	Xmanner-throw.mdrflx.LV-W

This -*alahk.e* is the same stem that Philip LeSourd (p.c. 2002) reports to have the distinctively AI+O property of taking not just [-NA] arguments, but also NA ones, thus matching the Penobscot examples in (62) and (63): this is something traditional TI stems simply cannot do. We must therefor exclude an otherwise simple alternative, namely, that this stem is some morphologically unusual instance of a TI stem with neither of the two typical unergative LVs associated with TI constructions (see §2.4.7).

These facts, ruled out under traditional Algonquianist accounts, and particularly by Rhodes 1990, are expected under the present account: all other things being equal, there is no expectation that internal arguments of AI+O stems---having the same morphosyntactic status as internal arguments of TI stems---should behave any differently with regard to "passivization".

The fact remains, however, that TI constructions regularly "passivize" with a light verb as described above, even as AI+O stems generally (but, as just demonstrated, not without exception) do not. First, a model of this "TI passive": we assume that "TI passive" morphology in these languages, e.g. Penobscot *-as.i*, is effectively nothing more than a LV expressing an 'undergo' predicate. Then---as we lay out in §2.4.6---assuming that the "TI stem" is nothing more than nominal material (which in the "active" TI construction is ultimately embedded under an unergative LV), the productive "TI passive" is simply another complex predicate collocation built according to the basic pattern given in §2.2.1. Structureally, [TI stem.passive] is simply 'undergo [verb]-ing'.

The only remaining question then becomes why it is that AI+O stems do not regularly do the same.

Here the (possible) solution lies less with an account of the nature of IN patient arguments overall and more with an account of the peculiar syntacto-semantic range of the typical AI+O Secondary Object: locative Theme and/or transferee Theme. That is, the general (but not exceptionless) non-"passivizability" of AI+Os seems to be a Algonquian manifestation of a more general cross-linguistic problem: pseudopassivation extraction from some types of adpositional complements is often poorly grammatical (71).

(71) Pseudopassivation in English

- a. This bed was slept in.
- b. ??This box was slept over.
- c. *This box was eaten under.

Now it has already been independently suggested here that the relationship of the AI+O (and "TI+O") argument to its verb resembles some portion (but not all of) the semantic range of English Instrumental adposition *with*. Consider first the variability of acceptable

pseudopassivization with *with*, i.e. (72) versus (73):

(72) Pseudopassivation with *with* in English

- a. ??That idea was come up with.
- b. ??That meeting was begun with.

(73) Variation in pseudopassivizability of *with*

- a. This cat was messed with.
- b. ?This spice was cooked with. (said while looking at a half-empty spice bottle)

(Interestingly, the acceptability of these forms seems to track some of the modal and aspectual licensing properties familiar to middles.)

Now note that pseudopassivization of transferee-Theme *with* is solidly ill-formed:

(74) Pseudopassivation in English for transferee Theme *with*

- *A gift was favored you with.
- *Presents were showered you with.
- *Hay is loaded the truck with.
- *An award is presented you with.

A case-absorption-based approach to passivization would of course attribute the ungrammaticality of the forms in (74) to the presence of the (notional) direct object, rather than to anything special about the syntactic function of *with*. And indeed this may be the foundation of an account for the overall problem of pseudopassivization with *with*, and indeed

for the small variations in non-"passivizability" of AI+Os. I will not try to offer such an account here; I only point out that at worst the present analysis has not introduced a new syntactic problem but simply connected an unexplained corner of Algonquian syntax to an old one. Lacking a means to formally characterize these particular localized antipathies towards passivization, it is enough for present purposes to point out that the phenomenon is well-established for languages like English, where even there it remains incompletely explained. Unpassivizability of most AI+Os appears to be the Penobscot manifestation of the same.

We conclude, then, that Secondary Objects and TI notional direct objects are not completely equivalent. What they share are two things. First, they are in some sense always secondary arguments, i.e. they appear only in configurations with at least some other, evidently syntactically higher, argument.

Second, they share the failure to be introduced via RPs, the elements that, by this analysis, make TA constructions the only special, marked pattern within the overall Algonquian transitivity system.

What we can at least suggest, then, is that N-Peripheral Marking is just the heterogenous "other" class (after a suggestion by Norvin Richards, ca. 2002) for nominal arguments.

This could also in principle also account for the further use mentioned earlier, namely, the marking of of an Impersonal argument in Idp intransitives, should it prove to be a genuine example of N-Peripheral Marking, contrary to our earlier suggestion. Since the morphology for such configurations varies significantly from language to language within the Algonquian family, this might suggest that it is the outcome of a featurally minimally specified argument, such that it too could end up with "default" morphology.

This view would also deal with the problem at hand, i.e. the apparent syncretism of Secondary Objects and TI notional direct objects (and NI Agents of TAs). That is, we could keep viewing N-Peripheral Marking as a head-marking Instrumental (as it were) and simply claim a surface syncretism of otherwise syntactically distinct arguments, i.e. a situation comparable to

the diversity of syntactic sources of the genitive noted by Jakobson 1974. In this light it is possible to suggest that both Secondary Objects and TI notional direct objects (and NI Agents of TAs) may be surface-syntactically identical in ultimately receiving Instrumental treatment, while maintaining distinguishing underlying syntactic properties with regard to other constructions such as "passivization".

2.4.4 N-Peripheral Marking and the Chamorro Oblique

A clue into the nature of this particular putative Instrumental can be found if we look at the the Oblique of Chamorro (Chung 1998, Gibson 1992, 1980; here and subsequently, the capitalization of "Oblique" is mine, to distinguish the language-specific element from the general notion of oblique). Its syntactic distribution is strikingly similar to that of N-Peripheral Marking in Penobscot, in that it indicates (after Chung 1998:51-52) "passive agents (i.e., the internalized external argument of passive), instruments, and second objects of verbs of transfer" (75a, 75b) as well as "[t]he complements of verbs that are intransitive at phonetic form, including nominalized verbs and antipassives" (75c, 75d).

(75) Uses of the Oblique in Chamorro (Chung 1998:51-52:(64)+(65))

- a. I täta mämpus ti ni-na'mäguf nu esti.
 the father very.much not agr.Pass-make.happy Obl this
 'The father was made very unhappy by this.'
- b. Ha-na'i si nana-ña ni buteya-n ketchap.
 agr-give mother-agr Obl bottle-L soy.sauce
 'He gave his mother the bottle of soy sauce.'

- c. Un Amerikanu ni diduk guinaiyã-nña nu i taotao
 an American Comp agr.deep love-agr Obl the people
 'An American whose love for the Micronesian people was
 Micronesia matai gi dia 29 di Disiembri.
 Micronesia agr.die Loc day 29 of December
 profound died on December 29th.' ([cited from] *Marianas Variety* 1/10/80)
- d. Guahu, mam-ahan yu' nu tres na kahita-n sembe'.
 I agr.AP-buy I Obl three L box-L sembe
 'As for me, I bought three boxes of sembe.'

These properties match those of Penobscot N-Peripheral Marking quite tightly. Chung notes a few further functions that do not carry over into Algonquian N-Peripheral Marking: the use of the Oblique for the complements of all nouns and adjectives, and of certain prepositions. These are reasonable exceptions to a complete equation of the two systems, since all involve the syntax of nominal and adpositional complementation, which is next to nonexistent in Algonquian languages.

The first of the properties shared with the Chamorro verbal Oblique, association with a passive agent, finds comparison in the N-Peripheral Marking of a [-NA] Agent acting on a [+NA] (Primary Object) Theme, mentioned earlier and repeated here more fully.

(76) [-NA] Agent acting on a [+NA] Primary Object (S:72:83)

- | | | | |
|----|--------------------------|-------------------------------|----------|
| a. | wəníhləkon nəpison | wə-nəh-l.ək ^w -əne | nəpison |
| | 'the medicine kills him' | 3-kill-RP.INV-N | medicine |

- b. wənihləkonal nəpisonal wə-nəh-l.ək^w-əne-al nəpison-al
 'the medicines kill him' 3-kill-RP.INV-N-NIpl medicine-NIpl

Here we simply observe again that this type of Agent argument takes N-Peripheral Marking; the motivation for reading the INV here as a passive-like structure (i.e. with an oblique NI Agent), and why it is the only option for a [NI[NA]] configuration in this clause-type (Idp) is discussed in Ch. 4.

We have already seen N-Peripheral Marking for the second objects of verbs of transfer in (56), (63), and (65). Note that this use of the Oblique in Chamorro also has a parallel reported for Tagalog ditransitives (Rackowski and Richards 2005:566:ft3, Rackowski 2002). Nominalized verbs cannot be compared, because in most Algonquian languages they do not carry N-Peripheral Marking or indeed any comparable argument-marking; this is so even in Wampanoag, which attests internally Person-featured derivations off of LVs (Goddard and Bragdon 1990). This gap is no surprise, however, since contrastive N-Peripheral Marking is already restricted to IdpIdc forms in the first place.

The most interesting parallel, then, is with the Chamorro form in (75d): an antipassive, with its notional direct object *tres na kahita-n sembe* 'three boxes of senbe' appearing as a morphosyntactic oblique, as indicated by the Oblique case marker *nu*.

Specifically, Chung reports that "[i]n antipassive clauses, the argument that the transitive verb would link to direct object position is either implicit or else realized as a syntactic oblique". The implicit-argument version here being exemplified in (77a) and the overt argument version in (77b) and (77c).

(77) Antipassive and Oblique in Chamorro Chung 1998:38:(35)

- a. Humanao pära u-fañ-akki guini gi un lanchu-n taotao
 agr.go Fut agr-AP-steal here Loc a farm-L person

'(The two) went to steal over here at somebody's farm.'

- b. Asta pa'gu ti man-hóhonggi yu' nu ennao ädyu i
until now not agr.AP-believe.Prog I Obl that that the
'Even now I still don't believe in those

siñát ginin i chächaflik.
sign from the dying.one
signs from the dead ([cited from] Cooreman 1983:184)

- c. Man-animu put pära ufan-mang-onni' botadót siha.
agr-spirited in.order Fut agr-AP-take voter Pl
'They made efforts to transport voters.' ([cited from] *Marianas Variety* 11/6/77)

As we will see in §2.4.6, both clauses of Chung's statement make for a perfect characterization of the TI construction as well, so long as we read the N-Peripheral Marking as equivalent to Chung's morphosyntactic Oblique, a view which we have given independent, Algonquian-internal reasons to maintain. This striking set of parallels between N-Peripheral Marking in Penobscot and Oblique-marking in Chamorro leads us to suggest that N-Peripheral Marking is in fact a kind of oblique.

A final digression of sorts: though we leave this point strictly speculative here, it should be pointed out that the Chamorro nominal case system (Chung 1998:50) appears to be quite comparable to that of Algonquian, in making a tripartite contrast that we can (after Chung) provisionally label as Unmarked, Oblique, and Local.

(78) Chamorro and Penobscot nominal case-morphology

a. Chamorro morphological case markers (Chung 1998:50:(60))

	Unmarked	Oblique	Local
Common Noun	---	ni	gi
Proper Name	si	as	gias
Pronoun	---	nu	giya

b. Penobscot morphological nominal

	Unmarked	Obviative (= Oblique)	Locative (=Local)
NA	---	-al, -a	-ək
NI	---	---	-ək

Each language's respective usage of these has some significant differences, of course.

Chamorro, unlike Penobscot, uses its Oblique in a system that has well-defined adpositions.

And only a subset of Algonquian languages (not including Penobscot) overtly contrast Obviative morphology in NI-class nominals. Finally, the status of the Obviative as an oblique (alongside the N-Peripheral Marking oblique) is far from obvious, though well worth investigation. The typological parallel of a three-way nominal case-marking contrast is nonetheless noteworthy.

2.4.5 Secondary Objects as Instrumentals: the etymology of the N-element

A further point suggesting that Secondary Objects are a kind of oblique/Instrumental is the apparent etymology of the most salient morphological manifestation of Secondary Object

status: the N-element. We suggest that the N-element may have arisen as a grammaticalization of an affixal verb, one still extant in a closed but substantial set of forms in Penobscot: *-ən.e* 'DO by hand' (79).

(79) Extant instances of full-lexical affixal verb *-ən.e* 'DO by hand'

- | | | |
|----|---|---|
| a. | məkəne

'NA chooses, does choosing,
picking out' (PD:278)

nəməkəne 'I...' | mək-ən.e-[w]

chosen-by_hand.DO ^{NA} -W |
| b. | məkəkəne

'NA confiscates, seizes by force' (PD:278)

nəməkəkəne 'I...' | məkək-ən.e-[w]

seize-by_hand.DO ^{NA} -W |
| c. | wánəkəne

'NA lifts up something, elevates
things' (PD:475)

nónəkəne 'I...' | wanək-ən.e-[w]

up_from_sitting-by_hand.DO ^{NA} -W |
| d. | pònəne

'NA releases' (PD:405) | pon-ən.e-[w]

released-by_hand.DO ^{NA} -W |

náponəne 'I...' [CQ: accentuation questionable, but evidently irrelevant]

- e. kəmotəne kəmot-ən.e-[w]
'NA steals, robs' (PD:190) stolen-by_hand.DO^{NA}-W
- nəkəmotəne 'I...'

Here the direction of grammaticalization appears to be from 'DO(ing) to X by hand' to '(while) holding X' to the Instrumental function 'with X'. This is a common cross-linguistic pattern: an example of the proposed intermediate stage is Amharic, where the equivalent of a Secondary Object (i.e. the notional direct object) of a verb of transfer is introduced via a gerundive of a verb of holding (80).

(80) Amharic 'holding' gerundive (after Appleyard 1995:174)

- a. wäräk'ätun yízo mät't'a
he brought the papers
lit. 'he came taking the paper'
- b. ñngidočč yížže mät't'ahw
I brought some guests
lit. 'I came taking guests'
- c. borsayen yizāw amällät'u
they ran away with my bag
lit. 'they ran away taking my bag'

- d. ík'ahĩn yĩžžellĩh ihedallāhw
 I'll take your things away for you
 lit. 'I'll go taking your things for you'

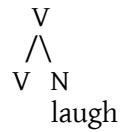
Appleyard explicitly comments, "[t]he gerundive of the verb ... *yazä* 'hold, take' is sometimes used in a similar adverbial sense often corresponding to English 'with'." (174). In other words, a gerundive of a verb of holding or taking is the effective Instrumental. In this light, given the internal reconstruction of Penobscot *-ən.e* as 'DO by hand, DO by holding', its grammaticalization as an Instrumental seems quite plausible.

This, then is the evidence for an oblique, and likely specifically Instrumental treatment for the notional direct objects of TI constructions. This is the first half of establishing the TI construction as an instance of an antipassive construction; we now turn to the second half: the nature of the verbal complex itself.

2.4.6 TI stems as antipassives

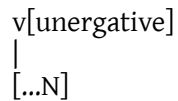
The second part of the claim that TI constructions are antipassives requires demonstrating certain features of the verbal complex, that is, of the basic TI collocation itself. Here too we offer a two-part claim: as an antipassive, this collocation must show evidence of being an unergative intransitive construction, which by the Hale and Keyser analysis (2002:15) is a complex predicate composed of two parts: a topmost (light) verb of the 'DO' type, taking an essentially nominal immediate complement (81).

(81) Hale and Keyser (2002:15) model of unergative *laugh*



Tweaking the structure above only in relabeling the V element as a light verb, we derive the following structure, a specific version of the simple [v[...]] pattern suggested in §2.2.1 to characterize all Algonquian verbal stem constructions.

(82) Hale and Keyser 2002 model of unergative (redux)



This simple two-part structure has a rich set of predictions for the TI construction, all of which are borne out empirically.

First: a notional direct object cannot be licensed by the LV itself. There are actually two possible ways to derive this prediction. First is that this is because the structure lacks an internal argument-introducing head comparable to an RP, while the LV itself licenses (as per §2.2.1) only one argument, the external argument (i.e. here the Agent). Alternatively, this inability of the LV to license a notional direct object could be due to the presence of the competing immediate nominal complement (see Piggott 1989 for a claim similar in spirit). We offer no strong claim in either direction, though the view of the OTI phenomenon offered in §2.4.8 perhaps matches the first alternative somewhat better. Either approach derives the crucial outcome: the notional direct object can only be introduced via an intermediate predication via an oblique/Instrumental (Baker 1988:133, Chung 1998:38). This, we argued in §2.4.5, is reflected in the IdpIdc clause-type by the N-Peripheral Marking pattern.

The interesting converse of this prediction is that TI constructions need not be obligatorily transitive: as antipassives, their notional direct objects are in no direct way related to the VP, and so are omissible (Baker 1998:131). This is a welcome outcome, since it predicts the existence of objectless TI stems---precisely one of the self-contradictory terms it has been necessary to adopt within the traditional Algonquianist analysis.

This observation is important enough that we devote §2.4.8 to laying out exactly how the analysis of TIs as antipassives makes the OTI phenomenon an expected outcome rather than a troublesome categorical self-contradiction. Here on grounds of economy we explain the absence of a category implied by a terminology based on permitting objectless transitives: there is no corresponding minimally derived "objectless TA", no OTA. This is simple: TA constructions, by dint of having RPs, inherently introduce an internal argument, and so they---unlike TIs---cannot be syntactically objectless without some additional derivation.

The second major outcome of this view is simple enough to discuss in full here: that the structure in (82) makes for at least two distinct possible derivational roads to a TI construction. First is a minimal one: simply a Root or other range of purely lexical material embedded under an unergative LV, with a structure as in (83).

(83) Minimal TI syntax

$$\begin{array}{c} v[\text{unergative}] \\ | \\ [\text{Root/nominal/lexical material}] \end{array}$$

Starting from the perspective of the corresponding TA, such a TI would be formed descriptively by deletion of the TA-marker *-(a)w*, as in (84).

(84) Minimal TI: "deleting" TA-to-TI correspondence

-n-aw.α 'do to NA by viewing, view NA as...'
 -n.am 'do [to NI] by viewing, view [NI] as...'

nólinawα nə-wəl-n-aw.α-[w]
 'I like NA's looks; I like NA's behavior; 1-good-view-RP.DIR-W
 I approve of NA'

nólinamən nə-wəl-n.am-əne
 'I admire NI [like the looks of NI]' 1-good-view.LV^{NA}-N

Presenting this TA-TI correspondence as we have here underlines a particular advantage of the present account: no need to appeal to this extra notion of truncation. Minimal/"deleting" TIs are simply verbal structures that have not added the crucial DAS-satisfying RPs, and so cannot function as a TA construction.

The other logical possible type of TI construction is one in which a configuration that does contain an RP somehow has its RP effectively nullified. Such forms are well-attested: these involve an element surfacing morphologically as -t (call it a "T-element") which stacks evidently directly above an RP and directly below the LV.

As we examine in greater detail in §2.4.8, this T-element has nominal properties, reducing the RP collocation to a simple gerund, and one embedded under a LV that---as we will see in (91), and will see again in (99) ---itself does not host a [+NA] Patient (nor, for that matter a [-NA] Patient), only a [+NA] Agent. Hence these "augmenting" TI constructions also cannot introduce [+NA] notional direct objects.

(85) Maximal TI: "augmenting" TA-to-TI correspondence

kəlam.α- 'hold NA in mouth' → kəlat.am 'NA hold in mouth'

a. with RP only:

nəkəlamα	nə-kəl-am.α-[w]
'I hold NA in my mouth'	1-bound-by_mouth.DIR-W

b. "augmentation" with T-element -t stacked over RP -.am:

kəlatam	kəl-am.t.am-[w]
'NA holds with [h/her] teeth, in [h/her] mouth'	bound-by_mouth.T.LV ^{NA} -W

nəkəlatam	nə-kəl-am.t.am-əp
'I...'	1-bound-by_mouth.T.LV ^{NA} -P

nəkəlátamən	nə-kəl-am.t.am-ən
'I hold NI in my mouth'	1-bound-by_mouth.T.LV ^{NA} -N

It is also possible within this system to have a pattern involving both a T-element and a descriptive "deletion" relationship with an RP. Such redundancy is permitted, but being redundancy, it is not expected to be a common pattern. And indeed, only one basic TA-TI correspondence set with this pattern is known: the explicit causative (86).

(86) Simultaneous "augmenting" and "deleting" TI

-h-^o.α- 'cause NA (to...)'

-h.t.aw- 'cause [NA] (to...)'

nətəliħ

'I make NA, treat NA'

nə-əl-h-^o.α-[w]

1-thus-cause-RP.DIR-W

nətəlihton

'I make NI'

nə-əl-h.t.aw-əne

1-thus-cause.T.LV^{NA}-N

The three possible TI constructions attested (and even the relative frequency of the last of them) therefore all fall out from the basic model of TIs as essentially "nothing special". The antipassive analysis of TI constructions predicts exactly the range of variation in possible morphosyntactic patterns attested for TIs, and particularly the contrast with the strict limitation on possible TA patterns. This range of variation is left simply stipulated by traditional accounts.

In the remainder of this section (§2.4.7-8), we show even more narrowly how the present model offers a much more precise account of the kinds of TI construction found in Algonquian languages. In §2.4.7 we examine the LVs involved in TI constructions and show how the antipassive analysis (coming from the TI-as-simple-LV-structure view) predicts and accounts for the attested lexical diversity of these elements. Finally, as mentioned earlier, in §2.4.8 we show how the common observation that antipassives have a syntax permitting them to drop their notional direct object directly accounts for the traditional self-contradictory OTI category.

2.4.7 LVs characterizing TI constructions

Up to now we have focused on the bottom half of the basic TI syntax model (87).

(87) Basic TI syntax

v[unergative]
|
[Root/nominal/lexical material]

Here we examine the nature of the LVs that create the overall unergative-antipassive predicate.

The basic claim is that these are, as for any unergative, NA-Agent-selecting 'DO' elements:

hence in glossing we simply label them as yet another LV^{NA}. The overwhelming majority of TI constructions involve one of two possible LVs: *-.am* (or allomorph *-.əm*; see Goddard 1980) (88a), or *-.aw* (88b).

(88) The two LVs characterizing "TI" constructions

- | | | |
|----|-------------------------|--|
| a. | nəkəlátamən | nə-kəl-am.t.am-ən |
| | 'I hold NI in my mouth' | 1-bound-by_mouth.T.LV ^{NA} -N |
| b. | nətəlihton | nə-əl-h.t.aw-əne |
| | 'I make NI' | 1-thus-cause.T.LV ^{NA} -N |

The synchronic motivation for the choice between these two, if any exists, is still uncertain. Richard Rhodes (p.c., 2001), developing the ideas of Denny 1978, suggests tentatively that in Ojibwa, the cognate to Penobscot *-.aw* is the marked/defined category, being a TI element corresponding to NI intransitives of the 'spatial/causative' kind (Denny 1978), which were exemplified in (3b). In turn, the cognate to *-.am* is simply a default for TI stems not meeting the criteria for use with *-.aw*, and hence has no defined semantics.

While this view has yet to meet acceptance in the overall Algonquianist literature, it might ultimately shed light on a further still unexplained observation: all TIs in *-.aw* involve a T-element (i.e. they are TIs in *-.t.aw*), whereas only a subset of TIs in *-.am* appear with the T-element (as in example (88) above).

One question we can still ask here is why there is such a diversity of TI-associated LVs in the first place. Contrast TA constructions: all uniformly utilize the same LVs, without exception.

Such derivational lexical diversity is in fact also a hallmark of antipassives. Regarding the diversity of antipassive morphemes in West Greenlandic---including variants such as *-si*, *-llir*, *-(ss)i*, *-nnig*, and *-ø*---Bittner 1987:195 notes that while earlier authors have treated these elements as lexically selected by the stem, more often than not, more than one of them can be used with a given stem. According to Bittner, restrictions on their interchangeability appear to derive from the semantics that each antipassive morpheme carries, with preliminary indications that aspect is the primary relevant semantic feature they carry. This bears some resemblance to Rhodes's suggestion that the elements we characterize as TI LVs may have distinctive semantic contributions, and is expected in the overall light verb model here, which already sets up semantically contentful light verbs simply to account for the ordinary intransitive system.

Regarding Chamorro, Chung (1998:382f10) notes that "some transitive verbs have morphologically idiosyncratic antipassives"; hence alternations like *tugi' : manggi'* 'write' and *kannu' : chotchu* 'eat', along with the antipassive of causatives in prefix *na'*- being created by shifting the primary stress onto that *na'*-. She further notes an asymmetry in syntactic productivity: while no Chamorro transitive ever seems to lack for a passive, certain transitive verbs do lack corresponding antipassives (Chung 1998:39). There are comparable gaps in TA-TI pairs, which of course cast doubt on a pure stem-agreement analysis, but these could be attributed to simple semantics, and so this potential additional parallel is not discussed here. Perhaps most tellingly in light of the discussion of the possible relationship between Secondary Objects

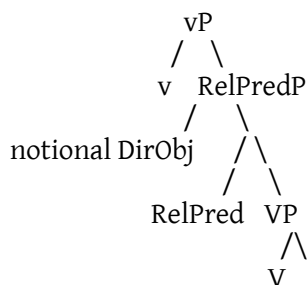
and notional direct objects of TIs, Chung 1998:39 also notes (following Gibson 1980:164-169) that verbs of transfer have a complex set of restrictions on the argument structure of antipassives formed from them.

This asymmetry in the degree of lexicality associated with LV derivation adds another striking parallel between the properties of Algonquian TIs and cross-linguistically established antipassives. And in fact it follows directly from the syntactic structure claimed to underlie TIs and antipassives in general.

Recall that in this model (as also in Baker 1988's model of antipassives, relativized to light verb syntax) the light verb has no direct relation to the notional direct object.

The antipassive construction as a whole is simply a specialized intransitive, derived via incorporation of a lexical/nominal element (be it a collocation headed by the T-element, or a simple bare Root-like element) which at best has a purely thematic relationship to the notional direct object. Contrast this with the structure proposed for the TA construction: the RP pattern necessarily puts the LV in a local relationship with the notional direct object:

(89) TA syntax



It is no surprise, then, that at least some of the LVs associated with TA collocations are clearly in some sense sensitive to the features of the notional direct object (perhaps even as agreement), and indeed, that all are wholly completely predictable in their selection (see Ch.4 fore more discussion).

Contrast this with the LV of a TI construction, which has no real relation to the NI notional direct object, and thus is in principle free to vary in form. The only argument-like element that could conceivably locally influence its form would be the T-element or simple bare Root-like element embedded locally beneath it. And indeed, this is what we find: use of *-am* or *-aw* is lexically specified as a collocation with said material (this again being a characteristic of affixal verbs; see §2.2.1). In particular, *-aw* is only ever found in collocations with the T-element, while *-am* is (in keeping, perhaps, with Rhodes's characterization of it as a default) found both with complements headed by T-elements and those with only simple lexical Roots/lexical head complexes.

Thus both the constraints on the distribution of TI-associated LVs as well as their relative lexical diversity (as against the fixedness of TA-associated LVs) fall out directly from attributing to them a basic antipassive syntax.

In fact, a third option is naturally left open as well by the DAS-specifying account. It should in principle be possible to have a TI construction which uses neither of these distinctive LVs, since these LVs (as we also see from the OTI phenomenon, see §2.4.8) are not actually specific requirements of the [-NA] notional direct objects.

Such stem-constructions are relatively few in Penobscot, and indeed in Algonquian languages in general (see Goddard 1979:74-75, Valentine 2001, Rhodes 1976:84, O'Meara 1990:81-83), but they are far from obscure, involving several rather high-frequency forms (90).

(90) Penobscot TIs without canonical "TI" LVs (after O'Meara 1990:81-83)

a. mič.i- 'eat [NI]'
 moh.α- 'eat NA'

nəmičɪn nə-mič.i-əne

	'I eat NI' (PD:282)	1-eat.LV ^{NA} -N
	nəməhα	nə-maw-ah- ^o .α-[w]
	'I eat NA' (PD:286)	1-eat(en)-by_GenInstr-RP.DIR-W
b.	ay.i-	'have [NI]'
	ayəw.α-	'have NA'
	nətayin	nə-ay.i-əne
	'I have NI' (PD:97)	1-exist.LV ^{NA} -N
	nətayəwα	nə-ay.i-(a)w.α-[W]
	'I have NA' (PD:97)	1-exist.LV ^{NA} -RP.DIR-W
c.	awehk.e-	'use [NI]'
	awehkəh ^o .α-	'use NA'
	nətáwehkən	nə-awehk.e-əne
	'I use NI' (PD:91)	1-use.LV ^{NA} -N
	nətawéhkəhα	nə-awehk.e-h- ^o .α-[w]
	'I use NA' (PD:91)	1-use.LV ^{NA} -cause-RP.DIR-W

It should be noted that the TI stem *awehk.e-* 'use [NI]'' looks suspiciously like a possible AI+O.

That is, the alternation in (90c) resembles AI+O and TA doublets such as (91), where an AI+O stem (91a) alternates with with a corresponding TA form (91b).

(91) AI+O and TA doublets (PD:153)

- a. *nətəlahkən* *nə-əl-əhk.e-əne*
 'I throw NI; I throw NA 1-Xmanner-throw.DO^{NA}-N
 [from animosity or contempt]'
- b. *nətəláhkəla* *nə-əl-əhk.e-l.α-[w]*
 'I throw NA [as in wrestling]' 1-Xmanner-throw.DO^{NA}-RP.DIR-W

The special reading of the AI+O form, with a NA internal argument, was noted by Siebert as a special idiomatic use---attested in a related form in the Siebert-collected text *wskìnohs nàkα mətəhsən*---of what he identified as a "TI class 3" verb rather than an AI+O. This seems to be due to the apparent fact that Siebert did not use this standard Algonquianist category of AI+O in his work; for example, it appears nowhere in his entire Penobscot Dictionary manuscript. Lacking a category for stems that can take both NA and NI notional direct objects, it stands to reason that he would have classified this form as a TI class 3, as this is the traditional Algonquianist label for the category we are discussing: TI constructions that use neither *-.am* (*-.əm*) (=TI class 1) nor *-.aw* (=TI class 2).

This said, the special readings he reports may in fact afford some partial insight into the contrast between a NA as Primary Object (of a TA) and a NA as a Secondary Object (of an AI +O). Here LeSourd (p.c., ca. 2003) reports for Passamaquoddy that there is some indication that the Secondary Object form is used when the NA Theme is less active or agentive (i.e. saliently semantically animate); Blears 2000:165 makes similar observations for Spanish animate

notional direct objects that do not take *a*-marking. This matches the clarifying gloss of the TA cited above: a wrestled throwee is certainly as active and agentive (and resistant) a throwee as possible. In reading the AI+O as a TI, Siebert evidently saw use of a [+NA] notional direct object as essentially relabeling it as [-NA] argument to indicated animosity or contempt---a plausible but otherwise wholly unattested use of the [±NA] contrast. In light of LeSourd's preliminary observations, it may be just as reasonable to attribute this semantic effect to the de-agentivizing---or "de-animating", if this is taken in the strictly semantic rather than featural sense---effect of treating the [+NA] argument as a Secondary Object of an AI+O.

The issue is further snarled by traditional categories: according to the criteria of Rhodes 1990 (see (68) and discussion), *awehk.e-* must in fact be a TI construction, since "passive" is attested: *awéhkaso* 'NI is used' (PD:92). For this, we refer the reader back to §2.4.2, where we argue that this criterion is a problematic one for clarifying the distinction between TI notional direct objects and AI+O Secondary Objects.

The existence of this third class of TIs reaffirms an analysis of the overall transitive system as really having only one core requirement: DAS-satisfying morphology for [+NA] Primary Objects. Not only does this account for the limited morphological range of TA constructions, but it also explains the corresponding relative diversity of patterns found functioning as TI constructions.

2.4.8 Antipassives can drop their notional object: OTIs explained

A third prediction of the analysis of TIs as antipassives is that their notional direct objects should in principle be omissible. This is a well-known empirical property of the constructions identified as antipassives (Baker 1998:131), being attested in a wide range of languages (92).

(92) Antipassives omitting notional direct objects (cited in Baker 1988:119-121)

a. Mam; England 1983

Ma ø-kub' w-aq'na-7n-a (t-uk' asdoon).

REC 3SA-DIR 3SE-work-DS 3S-with hoe

'I worked it (with a hoe).'

Ma chin aq'naa-n-a.

REC 1SA work-APASS-1s

'I worked [something].'

b. Greenlandic Eskimo; Sadock 1980

Angut unata-a-voq

man(ABS) beat-APASS-INDIC:3SS

'The man beat someone.'

c. Chamorro; Gibson 1980

Man-man-li'i' i lalahi

PL-APASS-see the males

'The boys saw something.'

In a moment we will discuss the formal motivation of this effect. First we point out quite possibly the most significant broadening of empirical coverage (descriptive adequacy) gained from treating TI constructions as antipassives. Namely, that doing so explains an otherwise problematic category in traditional Algonquianist analysis: the Objectless Transitive Inanimate (OTI). Such stems are so named because they have the form of a TI---e.g. the distinctive LVs

described in §2.4.7, and many cases T-elements as well—but can (or always) lack an overt or even discourse-implicit notional direct object.

That is, many TI collocations are attested as "objectless" plain intransitives, alongside their expected transitive uses (93).

(93) OTI constructions

a.	kə̀latam	kəl-am.t.am-[w]
	'NA holds with [h/her] teeth, in [h/her] mouth'	bound-by_mouth.T.LV ^{NA} -W
	nəkə̀latam	nə-kəl-am.t.am-əp
	'I...'	1-bound-by_mouth.T.LV ^{NA} -P
	nəkə́látamən	nə-kəl-am.t.am-ən
	'I hold NI in my mouth' (PD:186, 187)	1-bound-by_mouth.T.LV ^{NA} -N
b.	číksətam	čik-əsət.am-[w]
	'NA listens, listens and obeys'	silent-listen.LV ^{NA} -W
	nəčíksətam	nə-čik-əsət.am-əp
	'I...'	1-silent-listen.LV ^{NA} -P
	nəčíksətamən	nə-čik-əsət.am-əne
	'I listen to NI'	1-silent-listen.LV ^{NA} -N

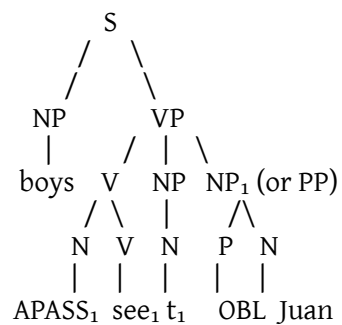
(PD:136)

c.	námihto	nam-h.t.aw-[w]
	'NA is able to see (figuratively, mentally, or physically'	seen-cause.T.LV ^{NA} -W
	nənámihto	nənam-h.t.aw-əp
	'I...'	seen-cause.T.LV ^{NA} -P
	nənámihton	nə-nam-h.t.aw-əne
	'I see NI'	1-seen-cause.T.LV ^{NA} -N

(PD:295)

Baker 1998:131-132 accounts for this property of antipassives by treating antipassivization as a special case of noun incorporation (94).

(94) Antipassive syntax (Baker 1988:132)

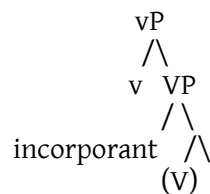


In his model, the antipassive morpheme is the formal direct object of the verb, into which it subsequently incorporates. The oblique notional direct object receives the theta role

interpretation it does simply through coindexation (indicated with the subscript numeral) with the incorporated antipassive morpheme.

Updating this to present terms, i.e. using light verb syntax, we make no particular claims for a movement analysis for the antipassive morpheme, but keep the essentials of Baker 1988's structure the same (95).

(95) Antipassive syntax (updated)



The chief update here is that we attribute incorporating verb status to the light verb rather than the lexical verb. And here "incorporant" is a cover term for the range of elements we have seen as complements of LVs head-dominating TI constructions, i.e. the T-element found in "augmented" TIs, or the Root element (or head-moved complex thereof) found in "deleting" TIs. Either one suffices as a stand-in internal argument. In (95), then, the label "v" is used only for consistency of comparison with Baker's original model; here it only stands for a categorically open-ended listeme/lexical element.

We have intentionally omitted from (95) indication of the attachment point of the oblique/Instrumental notional direct object argument, since this is not quite clear. Assuming as a default that it has the same scopal status as Secondary Objects, we expect it to be no higher than the VP. On the other hand, given that Penobscot is a head-marking language, we might read the N-element that indexes Secondary Objects as a special kind of late-Merged Applicative: this would be necessary to explain its surface position, which is outside of the affixal verb complex, i.e. evidently *higher* than the LV (and any RP), even as the argument it indexes scopes below a Primary Object.

This kind of stipulation would seem to be a rather significant problem for the overall analysis, were it not for certain peculiarities of the N-element overall. First of all, as noted earlier, unlike the LV, it is only available in one morphological clause-type. This alone suggests that it is not part of core argument structure morphosyntax, but instead, of something more like an agreement system. This despite its etymology (cf. §2.4.5) as a secondary predicate of 'holding', as this too actually also supports a late-Merge analysis, since this can readily be viewed as a late-level PF realization of a morphophonologically bound gerundive.

For these reasons, thin as they are, we continue on with the assumption that the rather distinctive morphological properties of verbal marking for the [-NA] notional direct object argument are a reflection of its status as a non-main-spine predication, i.e. the oblique of an antipassive.

Reworking the spirit of Baker's claim that that the antipassive morpheme is nothing more than an affixal nominal element also gives a principled account for the T-element characterizing "augmented" TI stems, even as the standard analysis simply treats it descriptively, as TI stem morphology. Specifically, this approach predicts this element to not only be able to appear as an antipassivizing head in TI constructions, but also to have the possibility of independently showing nominal properties.

This we find. It is a rarely noted observation that structures headed by this T-element are also found derived using light nominals, with no evident intermediate light verb. Hence in (96), alongside the unergative-LV-derived antipassive (and its corresponding TA) in (96a) we also find a derivation wherein a gerundive-like stem *pakahət*- 'biting' is the evident local complement of a nominal lexical affix *-ahsəm^o* 'dog, doglike creature' (96b)---a light(ish) noun head (or head complex). For comparison, in (96c) we offer independent instances of *-ahsəm^o* as a nominal affix.

(96) Initial *pakahət*- 'biting' = gerundivized (=TI) stem *pakahət*- 'biting'

a.	wəpákahəton	wə-pake-h-al-t.aw-əne
	'he bites it (inan.)' (S:38)	3-bite-shift-RP.T.LV ^{NA} -N
	wəpákahələl	wə-pake-h-al.α-[w]-al
	'he bites him' (S:38:)	3-bite-shift-RP.DIR-W-obv
b.	pakáhətahsəm	pake-h-al.t-ahsəm ^o
	'biting dog' (S:38: later addendum)	bite-shift-RP.T-dog
c.	màtahsəm	mat-ahsəm ^o
	'bad dog; shaggy dog' (PD:254)	bad/rough-dog
	màlsəm	məl-ahsəm ^o
	'wolf' (PD:260)	grey-dog

The T-element in these forms is clearly not a transitivizer, as standard analysis would have it be. In contrast, treating it as a detransitivizing nominal element sets up forms like (96b) quite simply as having the same kind of morphosyntax as the gloss. That is, the T-element is structurally and featurally most similar to the light nominal gerundive element *-ing* in English *bit[e]ing dog*. Indeed, a pseudo-antipassive can be derived in English using precisely this kind of structure (97).

(97) English pseudo-antipassive

a. The cat bites the dog.

- b. The cat does biting of/with/using/gripping the dog.
- c. *The cat does biting the dog. (on [does biting] [the dog] reading only)

In (97a), we have a plain active transitive; in (97b), the substitution of a derived gerund (*biting*) embedded under a light verb (*do*) results in a structure that cannot introduce a full notional direct object except via syntactic obliques, i.e. adpositions or 'holding' gerundives. In other words, the English syntactic equivalent for the structure argued for "augmenting" TIs has the key properties of an antipassive.

With this, then, we have the final piece of evidence that TI stems are antipassives.

2.5 TA~TI interpretational asymmetry explained

The DAS-based model explains why TAs are restricted to just one quite limited range of morphological pattern (RP.LV), while three basic patterns are open for TIs: a bare one ("deleting"), a derived one ("augmentation"), and both at once. All three strategies derive an unergative structure unable to directly introduce an argument with an RP, thus making it impossible for them to introduce [+NA] Primary Objects, but still able to carry a [-NA] argument as a syntactic oblique/Instrumental. This disconnect between the TI verbal complex and its notional direct object in turn gives rise to a greater potential for lexical diversity, this too being an established feature of antipassives.

There is one final prediction of the system that we have heretofore held off from mentioning, a prediction that continues the thread of accounting for the incredible morphological apathy of the TI towards its notional direct object.

This begins with a simple observation: given the same minimal inflection (the *IdpIdc* third person "W"), TA and TI collocations have completely opposite readings.

Specifically, with such marking, a TA collocation interprets as as "passive", i.e. an Impersonal Agent acting on the [+NA] Primary Object argument (98), whereas a matching TI

collocation glosses as an unergative with a [+NA] argument as Agent (99): an OTI.

(98) Minimally inflected TA: Impersonal Agent "passive"

...tákamα	tak-am.α -[w]
'...he was struck' (awehsosak:12)	hit-RP.DIR-W

(99) Minimally inflected TI: agentive unergative (OTI)

číksətam	čik-əsət.am-[w]
'NA listens, listens and obeys'	silent-listen.LV ^{NA} -W

This radical asymmetry is wholly unexpected under a stem-agreement account of the TA-TI contrast, which would of course predict identical argument-structural interpretation. The present model, in contrast, offers a ready explanation. In (98), lacking other overt arguments, the RP introduces only the [+NA] internal argument, giving rise to the Impersonal-Agent "passive" (we examine this further in §4.6.3). The TI-antipassive in (99) likewise introduces (via its LV) only its [+NA] external argument Agent, giving the unergative intransitive.

This consistent contrast---a morphosyntactic minimal pair, as it were---exemplifies the core predictions of the proposed structural model of Algonquian transitivity, and their contrast with the standard Algonquianist model.

And with this, we now have a set of syntactic structures within which we can begin to examine how pronominal features interact in configuration.

3 **Referential Access Dependency: Pronominal Feature Structures, the Proximate-Obviative Contrast, and Clausal Dependency**

3.1 Introduction

3.1.1 Overview

The goal of this chapter is to derive rather than stipulate pronominal features and their 1 » 2 » 3 hierarchies. To achieve this we will apply only two basic tools. First is a very elementary structural distinction, the topological contrast between a *Core* and its *Periphery*. Second is the operation of iteration, applied over the basic structural unit of the Core plus its Periphery.

We claim that observed 1 » 2 » 3 pronominal-feature hierarchies (and extended ones, such as Proximate » Obviative) are not primitives. They are instead the outcome of inherent dependency relationships created by the iteration of the Core-Periphery structure; specifically, dependency of referential access, a notion from here on referred to as *referential-access dependency* (RAD). In the RAD model, since pronominal features have an internal syntactic (Core-Periphery) structure, like any syntactic complex, their interpretations are compositional in the Fregean sense (Heim and Kratzer 1998:2-3): their complete interpretations being derived by reading off successive nodes of asymmetrical dependency relations holding between the subconstituents of those features. The result is that the interpretations of certain pronominal features are in a fundamental way built off of--and thus dependent on--those of others.

The foundational example here is 3rd person pronominal status. Standardly viewed as the absence of Speech Act Participant (SAP, i.e. 1st or 2nd person) features (Harley and Ritter 2002a,b, Benveniste 1966), we show 3rd person pronominal status to be interpretationally dependent on the prior determination of SAP pronominal status. In present terms, 3rd persons are referential-access dependent on SAPs.

Through this we demonstrate that appeal to a pre-established pronominal feature

hierarchy is unnecessary, since the dependencies such a hierarchy encodes (and indeed the features themselves) are already derived by the simple iteration of Core-Periphery structure from the basic discourse-referential Core of 1st person. This, we argue, is what leads to syntactically active pronominal hierarchy effects. These arise from purely structural constraints on the derivational dependencies that exist between different pronominal feature complexes.

Deriving pronominal features by a simple internal syntax (one not to be confused with familiar phrase-structural syntax) leads to a surprising result: we can demonstrate that the constraints on the distribution and interpretation of pronominal-feature dependencies match exactly those operating over the distribution and interpretation of Independent and Dependent clauses. This is because the [\pm Independent] status of a clause is also a matter of establishing a referential-access Core (i.e. the Independent clause) that can host Periphery dependents, i.e. Dependent clauses.

This chapter thus continues the modern syntactic tradition of connecting seemingly unrelated phenomena by identifying a common set of constraints that they collectively operate under. This particular analysis produces a rich range of outcomes, the broadest of which is the demonstration that pronominal feature hierarchy effects can be shown to derive directly from the same minimal syntactic mechanisms that derive the interpretation of grammatical person contrasts.

A further set of outcomes are narrower in their range of application, but equally welcome, in that they solve or make a significant new step towards solving certain longstanding problems of Algonquian grammar.

First of these is a simple clarification as to what the Proximate-Obviative contrast is. The proposed model sets it up as the outcome of the next logical Core-Periphery iteration after the one that produces the SAP vs. non-SAP contrast. This predicts the existence of exclusive parallels between these two paired types of pronominal feature contrast, parallels of interpretation and distribution, which we demonstrate in depth.

Second is a specific explanation for why special morphology (Obviative) is obligatory on Possesseees when the Possessor is 3rd person, but not when the Possessor is 1st or 2nd person. This is attributed to the extra level of structure---the extra step of mediating referential-access---inherently involved in the full composition of referential-access interpretation for Possesseees of 3rd person Possessors.

Third is an account for the observed constraint against multiple non-coordinated referentially distinct Proximates within a single transitive-clausal domain. This is explained by showing how Proximates, like SAPs, are Core elements defining their iterational domain, and thus like any true geometric Core, cannot be truly multiple.

Fourth is a syntactic explanation for a host of interpretational effects of the Proximate-Obviative contrast. These effects have traditionally been viewed as a somehow wholly distinct aspect of the contrast, and so termed "discourse obviation" as opposed to "syntactic obviation" (Bruening 2005, Buszard-Welcher 2004, Hasler 2002, Brittain 2001, Aissen 1997, Goddard 1990, 1984). We show instead that the discourse-interpretational effects of the Proximate-Obviative contrast and its distributional constraints both come directly from one single source: its fundamentally syntactic-configurational nature. In short: both the interpretational properties of this contrast and the distributional constraints that hold over it are attributed to inherent properties of the contrast's simple structural derivation via the Core-Periphery system.

These two sets of properties---interpretational and distributional---form the framework of this chapter's overall argumentation. That said, we stress that the distinction between the two is made strictly for presentational utility; their ultimate formal derivation from the same source will be evident from the instances where the line between the two is, as expected, rather blurry.

In sum, we show that minimal structure-building algorithms predict a surprising amount of the syntactic behavior of pronominal features, while also solving some longstanding "exotic problems" in Algonquian grammar.

3.1.2 Layout

We lay out the formal structure of the Core-Periphery system in §3.2-3, starting in §3.2 with the basic constraints associated with a simple Core-Periphery structure, and then in §3.3 demonstrating those that emerge as we iterate this unit structure. In §3.4 we then show this abstract system's direct translation into pronominal feature terms, and compare this derivational approach to pronominal features to another one, the feature geometry of Harley and Ritter 2002a,b.

In §3.5 we clarify the nature of referential-access dependency by demonstrating its utility in predicting structural interpretation-derived asymmetries in the treatment of SAP Possessors vs. non-SAP Possessors. From there we turn to reviewing the recurrent interpretational and distributional constraints arising from the Core-Periphery structure, demonstrating first how they hold for English clausal dependency (§3.6), and then showing the same effects reappearing in basic pronominal features (§3.7), and then once more in the Algonquian Proximate-Obviative contrast (§3.8). §3.9 closes the chapter with a summary of remaining problems and proposals for future investigation within this model.

3.2 Very elementary topology: the Core-Periphery system

Elements combining asymmetrically (the crucial feature of this system) can be modeled in topological terms, i.e. as consisting of a Core and a Periphery:

(1) [Core]Periphery...

Immediately we observe two very distinctive properties of such structures. First is that only one Core is possible per Core-defined domain, unless said Core is derived via coordination, i.e. two sub-elements combine to create one Core. In other words, the only possibilities are (2) and

(3)

(2) [Core]Periphery...

(3) [Core_i & Core_j]_{Core} Periphery...

but never multiple uncoordinated Core elements that are distinct in identity (4).

(4) *[Core_i]_{Core}, [Core_j]_{Core} Periphery...

Nor can there be an interpretable structure that wholly lacks a Core element, e.g. one that fundamentally consists only of one or more Periphery elements (5).

(5) *Periphery...

These constraints are all simply the outcome of a simple topological definition of a Core: there cannot be, in any deep sense, more than one Core per Core-defined domain (hence (4) above), nor anything less than that one Core per Core-defined domain (hence (5)).

This contrasts with the second observation: that multiple referentially distinct Periphery elements, as structural "other"s, are unlimited per Core-defined domain (6), and indeed are not required at all (7).

(6) [Core] Periphery_i, Periphery_j, Periphery_k...

(7) [Core]

Again, this is simply the outcome of a simple topological definition of a Core and the domain established by that Core.

3.3 Iteration/cyclicity

Now let us add a further assumption: that iteration of the Core-Periphery structure is possible among elements within the Periphery zone:

(8) Core-Periphery iteration

- | | | |
|----|---|------------------|
| a. | [Core ₁] Periphery ₁ | first iteration |
| b. | [[Core ₁] Periphery ₁] _{Core₂} Periphery ₂ | second iteration |

Since Peripheries are unlimited "open" sets, it should be possible to iterate the Core-Periphery pattern within a Periphery:

(9) Periphery₂ → [Core₃ - Periphery₃]_{Periphery₂}

- | | | |
|----|--|------------------|
| a. | [Core ₁] Periphery ₁ | first iteration |
| b. | [[Core ₁] Periphery ₁] _{Core₂} Periphery ₂ | second iteration |
| c. | [[Core ₁] Periphery ₁] _{Core₂} [[Core ₃] Periphery ₃] _{Periphery₂} | third iteration |

However, we stipulate that this iterability of the Periphery is limited to absolute edgehood. Hence, once a Periphery is internal to a new Core, as in (9b), it is no longer "open", that is, it is no longer an absolutely peripheral element, and so cannot itself iterate a Core-Periphery pattern internally.

Thus the Periphery₂ in (9b) can iterate to produce the [[Core₃] Periphery₃] constituent in (9c), but, once Periphery₂ is established (9b), the Periphery₁ embedded within that same structure cannot itself iterate to form a comparable [[Core₃] Periphery₃] constituent out of itself. This makes the form in (10) an impossible alternative third iteration of the series in (9).

(10) Absolute edgehood constraint: impossible iterational outcome

*[[Core₁] [[Core₃] Periphery₃]_{Periphery₁}]_{Core₂} Periphery₂ third iteration

This constraint is still a stipulation, though intuitively "absolute edgehood" being what permits a Periphery to iterate itself internally into a further Core-Periphery pattern suggests a principled structural basis.

We are now in a position to examine the types of relationships that elements associated with each node in these structures may have with each other. Note first that the permissible derivations in (10) set up a parallel: the relationship between Core₁ and Periphery₁ is parallel to the relationship between Core₃ and Periphery₃; and both are parallel to that holding between Core₂ and Periphery₂:

(11) Co-cyclic relationships (same iteration)

- a. [Core₁ - Periphery₁]_{Core₂}
- b. [Core₃ - Periphery₃]_{Periphery₂}
- c. [Core₂ - Periphery₂]

This special relationship is that of *co-cyclicity*, i.e. being sisters in an iterative cycle of Core-Periphery. This contrasts with the corresponding set of relationships (12),

(12) Non-co-cyclic relationships (crossing iteration margin)

a. Core₁-Periphery₂ (= Core₁-Core₃, Core₁-Periphery₃)

b. Periphery₁-Periphery₂ (= Periphery₁-Core₃, Periphery₁-Periphery₃)

which represent a crossing through at least one margin of cyclic iteration. Call this a *non-co-cyclic* relationship.

Thus from the simple iteration of a Core-Periphery structure, we have two sets of possible relations, co-cyclic and non-co-cyclic, as well as a strictly constrained set of possible overall structural relations between elements. What is this useful for? Pronominal features, among other things.

3.4 Core-Periphery structures and pronominal features

In the previous section we established a set of abstract structural relations and constraints thereon. We now propose this set of structural relations as our model for pronominal features and for their dependencies relative to each other. Specifically, we offer the following translation from the second-iteration structure in (9b) to more familiar pronominal features.

(13) Translating from Core-Periphery model to familiar pronominal features

[[Core₁] Periphery₁]_{Core₂} Periphery₂ second iteration

Core₁ = [Speaker]

Periphery₁ = [Addressee]

Core₂ = [Person]
 Periphery₂ = [] = non-Person = 3rd person

The association of Core₁ status with the [Speaker] feature captures the intuition that the 1st person is the deictic core of referential-access: all other pronominal statuses are determined off of the assignment of Core₁ status to some individual referent in the discourse.

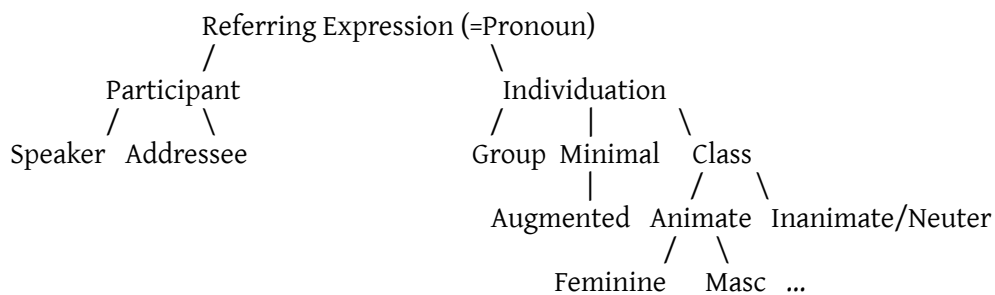
Similarly, since 2nd person status is established as the most direct and immediate relation to the 1st person, within the domain of speech act participants, it is represented structurally as Periphery₁. Then, when defined via a second Core-Periphery iteration, the new Core₂ element defines a constituent containing the set of speech act participants (Core₁ and Periphery₁): what is known in featural terms as the [Person] or [Participant] feature.

Finally, the Periphery₂ created by such a second iteration sets up an "other" element, one which---at this level of derivation---belongs to and defines no structural Core, and distinctly not to the Core₂ whose position gives its constituents the properties represented featurally as [Person] or [Participant]. Hence the notion of Periphery here matches the non-Person status of 3rd persons noted since at least Benveniste 1966.

This is how a Core-Periphery pattern derives the familiar three-way contrast of 1st, 2nd, and 3rd person, as well as the well-established distinction between Speech Act Participants (1st and 2nd person) versus non-Speech Act Participants (3rd person).

Let us compare how this model compares with pronominal feature geometry offered by Harley and Ritter 2002a,b (hereafter "HR"), sketched out in (14).

(14) Harley and Ritter 2002a,b: pronominal feature geometry



As we can see, the present model is not so much a replacement for the HR structure as it is a different perspective on it, namely, one taking the [Speaker] node as its derivational starting point, i.e. Core₁. For example, the special relation of 1st and 2nd person, both with each other and against 3rd person, is captured in the HR model by stipulating a Participant node common to both Speaker and Addressee. This is a structure not terribly different from that of the Core₂ constituent, except in that it treats [Speaker] and [Addressee] as structurally coeval features, and so misses a possibly desirable asymmetry, i.e. that the [Addressee] feature is interpretationally dependent on the [Speaker] feature. This asymmetry is directly captured in our model by the asymmetric internal structure of the Core₂ constituent.

An much stronger contrast between the models emerges when we look to represent the Proximate-Obviative contrast in the HR system. The Proximate-Obviative contrast is a split in the 3rd person, which in the HR model is represented as absence of a [Participant] node, leaving only a Referring Expression with a variety of distinctions of Individuation, along with the possibility of gender-class features as well.

As we shall see, the interpretational effects of the Proximate-Obviative contrast derive from none of these features (nor from privation therefrom): instead, they instantiate an interpretational asymmetry---of referential-access dependency---comparable to that operating between 1st and 2nd persons, and between SAPs and non-SAPs. We have just seen that the HR system captures the latter (albeit not by the same narrative), but not the former, even though

Obviative contrast.

In short, simple iterations of Core-Periphery structure are all that is needed to derive fundamental pronominal feature contrasts, as well as less familiar ones such as the Proximate-Obviative contrast.

I should note that why languages seem to stop at three iterations is still unclear. Algonquian languages do permit Obviatives upon Obviatives, as it were, but have no dedicated morphology clearly distinct to such constructions. I can only speculate that this must be bound up in some way with the overall "rule of three" effects noted by Boeckx 2005 as having a limiting effect on representations across a wide range of linguistic phenomena.

In this vein, it should also be noted that what is being argued for with regard to the structural relations leading to pronominal feature effects is *a* syntax, not *the* syntax, i.e. it is a limited set of structure-building rules, but quite evidently not the same syntax that builds familiar phrase structure. The purpose of this chapter is not to equate the two (even though a mapping must eventually be made), but simply to show that many aspects of pronominal feature relations (along with clausal dependency) can be predicted by a model syntactically structured in this way.

3.5 Referential access dependency

3.5.1 What is referential-access dependency?

Our basic claim from the previous section is that pronominal features have an internal structure: their interpretations are read off of nodes of Core-Periphery iteration, each node's interpretation being a composition of itself with all previously derived nodes. As such, the Core-Periphery structural derivation has inherent asymmetrical dependencies: e.g. a Periphery is definitionally dependent on its Core, while the reverse is not the case. It is these asymmetric interpretational dependencies that we identify as the source of pronominal feature hierarchy

effects.

We propose the term *referential-access dependency* (RAD) as a means to refer to these asymmetric interpretational dependencies. The term is intended to capture the observation that this asymmetry is one of access to the complete interpretation and assignment of a given pronominal featural status.

Let us make this more concrete.

Assume that for a given speech act, we start with an original pool of discourse-deictically yet-to-be-distinguished Individuated Referring Expressions, in the HR sense: in other words, nascent 3rd persons. For simplicity's sake, call these *referents*. The nature of a speech act makes the assignment of 1st person pronominal status to one of these referents inevitable (cf. Safir 2005, *inter alia*). Same again for the assigning of 2nd person pronominal status to a given referent---except that this assignment is dependent upon the prior determining of 1st person pronominal status, insofar as it is impossible to do the former without the latter.

Now this is even more so for 3rd persons: once 1st and 2nd person status set up is set up for two referents, true grammatical 3rd person status is defined--and only then defined---as that given to whatever referents remain. Their "other" status is a direct reflection of this referential-access dependency.

The result of this all this is, as stated above, full compositional referential-access to certain pronominal featural statuses (e.g. 3rd person) is asymmetrically dependent upon the assignment of other certain pronominal featural statuses (e.g. SAPs).

This means that 3rd person referents add a level of structural complexity---which entails interpretational complexity---not found in SAP referents. We can see an interesting consequence of this added complexity in the form of the simple example in (16).

(16) her_a mother_b

Here, reaching full access to the particular discourse reference of the *mother* referent here (noted as subscript *b*) requires (at a minimum) a two-step process.

First off, we ignore the basic referential-access dependency of first-iteration Periphery on first-iteration Core (i.e. of 2nd person on 1st), as it plays no direct role in the relevant iteration.

We therefore begin this process of referential-access composition with the second-iteration Core discourse elements, represented in (17) as [YOU and ME], already established. As the Core refers onto which 3rd person referents---since they are second-iteration Periphery elements---depend for full structural interpretation, these must be established before we can reach the reference of the intermediate 3rd person, the possessor denoted by *her* (noted as subscript *a*). We can schematize such asymmetric relations using " \leftarrow " to indicate a link in this routing of referential-access.

The upshot of this structure: starting with the [YOU and ME] Core, then moving through the intermediate reference of *her* (*a*), we can finally reach the referent of *mother* referent (*b*).

(17) [YOU and ME]-access to the *mother* referent in *her mother*

her_a $mother_b$

$[YOU\ and\ ME]_{Core_2} \leftarrow [her_a]_{Core_3} \leftarrow [(her)\ mother_b]_{Periphery_3}$

This structure captures the crucial property here: to access completely the discourse reference of the *mother* referent, we need more than just the reference of the [YOU and ME] Core; we must necessarily have access to the reference of *her*: there is no skipping the intermediate referent.

Structurally, this means that fully interpreting *her mother* involves a *third*-iteration derivation (see (9c)), with *her* as the third-iteration Core, and *mother* as the third-iteration Periphery.

Within the constraints of the Core-Periphery model, then, an interpretational structure such as in (18) is impossible, because *her* is itself a Periphery dependent on the reference of the [YOU and ME] Core, and the full interpretation of the *mother* referent of *her mother* cannot be composed without that of *her*.

(18) [YOU and ME]-access to the *mother* referent in *her mother*

her_a $mother_b$

$*[YOU \text{ and } ME]_{Core_2} \leftarrow [(her_a) \text{ mother}_b]_{Periphery_3}$

In the present terminology, then, the *mother* referent is referential-access dependent upon the *her* referent.

We can clarify the nature of this system by the instructive contrast given in (19), where the Possessor has SAP features rather than non-SAP ones.

(19) [YOU and ME]-access to the *mother* referent in *my/your mother*

$my/your$ $mother$

a. $[YOU \text{ and } ME]_{Core_2} \leftarrow [(my/your) \text{ mother}]_{Periphery_2}$

b. $*[YOU \text{ and } ME]_{Core_2} \leftarrow [my/your]_{Core_2} \leftarrow [(my/your) \text{ mother}]_{Periphery_2}$

Here the Possessors *my/your* are not referential-access dependent on the [YOU and ME] Core,

because they are identical to those elements, rather than deriving a further distinct referential status from them. This identity makes the representation in (19b) redundant, unmotivated, and ill-formed.

To summarize: SAP Possessors have no intermediate step of referential-access relation, since there is no referentially distinct intermediate referent. A non-SAP (=3rd person) Possessor requires an intermediate level of interpretational structure, to pass through and pick up the necessary intermediate referent.

In §3.8.1 we will demonstrate the deeper relevance of this asymmetry, since it offers a means to model an otherwise unexplained property of the distribution of the Proximate-Obviative contrast relative to possession constructions: 3rd person Possessors obligatorily impose Obviative status on their Possesseees, while SAP Possessors do not.

For now we simply note that referential-access dependency of pronominal features is just an observation about the interpretational consequences of the structural relations derived via Core-Periphery mechanism. Here we have seen that first-iteration Core-Periphery status is a structural means to capture the common observations that 1st and 2nd person features are constants (Safir 2005, *inter alia*), as their discourse referents are inherently available with every speech act. The dependency of subsequent iterations on this first iteration is what leads to the referential-access dependence of non-SAPs on SAPs, and, as we see here, of Possesseees-of-3rd-persons upon their Possessors.

3.5.2 Referential access dependency vs. referential dependency, and c-command

The term "referential-access dependency" has been chosen here in favor of the simpler term "referential dependency" so as to avoid confusion with the traditional notion of referential dependency, which might more precisely be called coreferential dependency, being the relationship of an anaphor to its antecedent, or a coreferring pronoun to a full referring expression.

Referential access dependency, in contrast, is what characterizes the relationship of the referent of *mother* in the phrase *her mother* to the referent of *her*: the *mother* referent cannot be fully interpreted without access to the referent of *her*. In having this sense, we might call it "referential-access routing".

Referential access dependency is thus quite clearly not coreference dependency, since it is apparent that coreference dependency between *her* and *mother* in *her mother* is impossible (though why that is so is an interesting question in its own right, no matter how obvious it seems).

What continues to complicate the situation, however, is that both phenomena are evidently intimately tied up with the structural relation we presently call *c-command* (Chomsky 1995, Reinhart 1976). Coreference dependencies, whether viewed as licensed by or (inversely) ruled out by them, are generally attributed to certain *c-command* configurations. Referential-access dependency does seem to have *c-command* sensitivities, in that we can associate it directly with *c-command* configurations such as double object Goal-Theme constructions (and related nominal Possessor-Possessee constructions), via a simple rule that referential-access dependents cannot (in such configurations) asymmetrically *c-command* their referential-access sources. This captures the ill-formedness of [3[1[2]]] configurations in such structures---in other words, the Person-Case Constraint (Anagnostopoulou 2003, Boeckx 2000, Bonet 1995, 1994, 1991). The strength of the present account is that it predicts the same constraints on related configurations of Proximate and Obviative; and indeed, these are attested, in the form of what Rhodes 2002, 1993 calls the Possessor Constraint.

I will say nothing further on these matters now, since they form the subject of Ch. 4. Here we simply set up the basic model of Core-Periphery-derived referential-access dependency, and suggest this as a more principled alternative to the stipulation of a pronominal feature hierarchy that characterizes analyses of Person-Case Constraint effects. This should not be taken as a claim to explain why double object Goal-Theme constructions and their ilk alone manifest such constraints: I can offer no such account. I do suspect, however,

that the answer may come in part by coupling the "feature-internal structure" analysis offered by the Core-Periphery model together with a second intuition: that PCC-construction-blocked configurations of referential-access dependents asymmetrically c-commanding their referential-access sources might in some still ill-defined way mirror Condition A violations, i.e. those of anaphors asymmetrically c-commanding their antecedents.

This sets up the relationship of the RAD/Core-Periphery analysis to the rest of this dissertation. For the remainder of the chapter, we seek to demonstrate the robustness of such a model by showing that it can link together three not immediately obviously related syntactic phenomena. We proceed, then, to look at how the Core-Periphery model derives the interpretational constraints and distributional constraints operating over English clausal dependency (§3.6), general pronominal features (§3.7), and finally, the Algonquian Proximate-Obviative contrast (§3.8).

3.6 Interpretational and distributional constraints on clausal dependency

3.6.1 Preliminaries

The overall claim of this work is that referential-access dependency has discourse-informational consequences, but arrives at these via thoroughly syntactic means: the specific interpretational and distributional constraints are driven by the limits of a simple Core-Periphery topology.

These constraints will be discussed one by one as we proceed; they are summarized here in (20) both as a preview and for easy reference, along with the abstract structural examples described in §3.2 to which they correspond.

- (20) Interpretational and distributional constraints arising from the Core-Periphery structure

a. Interpretational constraints

(ICa) Interpretational prominence of Core element (2)

(ICb) Interpretational well-formedness of wholly freestanding, "lone" Core (7)

(ICc) Morphologically Periphery elements may surface alone, but crucially always and only with the interpretation of being supported by an implicit Core (5)

(ICd) (corollary of (c)): Implicational access to a Core from a Periphery element is always provided by a freestanding Periphery (if it is to be fully interpreted)

b. Distributional constraints

(DCa) Only one Core is possible per Core-defined domain (unless coordinated, i.e. two combine to create one) (4)

(DCb) Periphery elements, as structural "other"s, are unlimited per Core-defined domain (6)

(DCc) Any Core element collocated with any number of Periphery elements is (still) interpretationally (and syntactically) treated as a Core element, never as a Periphery (subordinate) element

Again we emphasize that the interpretational/distributional contrast is for expositional utility only, and has no principled status. As is expected, since the distribution of forms that are (in the generativist sense) grammatical as opposed to ungrammatical is essentially the distribution of forms that are interpretable versus forms that are not.

Now familiar syntax abounds in mismatches between grammaticality and interpretability (though much depends on the model of how interpretation is arrived at). Why grammaticality tracks interpretability so consistently in this particular syntax is still an open question, but it appears to be an empirically valid claim.

In this section we will introduce these two sets of constraints beginning with the data most likely to be accessible to the reader, namely, clausal dependency structures in English. This will set the pattern for the following two sections, which will examine the same constraints as they apply to basic pronominal features (§3.7) and the Proximate-Obviative contrast (§3.8).

3.6.2 Interpretational constraints on clausal dependency

(ICa) Interpretational prominence of Core element

A certain kind of prominence is quite evidently associated with Core status. Consider clausal dependency of the simplest type: a simple concatenation of an Independent clause with an adjunct Dependent clause marked by complementizer *while*:

(21) [Core]Periphery

- a. [I eat] while I read.
- b. [I read] while I eat.

At a crude level, these two sentences are logically equivalent: for both sentences, *I eat* and *I read* are true, and temporally simultaneous.

However, there is a subtle yet clear difference of interpretation. Namely, that the perspectival "spotlight" is on the eventuality syntacticized in the unembedded clause. In (21a), we view the act of reading as peripheral, hanging off of a core act of eating. In (21b), we view the act of eating as hanging off of a core act of reading. The choice is evidently discourse-related; here the syntax serves to put one and only one element in "primary" or "prominent" status. At present I still lack a means to formalize the meaning of "primary" or "prominent"

status more precisely. These intuitions, informal as they are, remain robust enough that we can try to progress on their strength alone.

Now consider the forms in (22), cited to illustrate (ICb).

(ICb) Interpretational well-formedness of wholly freestanding, "lone" Core

(22) [Core]

- a. I eat.
- b. I read.

These lone Core structures are well-formed on their own, receiving clear interpretations. In contrast, the Periphery forms, so long as they are bereft of any kind of context supplying a main clause host, are not:

(23) *Periphery

- a. *while I read.
- b. *while I eat.

These illustrate the next Core-Periphery-derived effect:

(ICc) Morphologically Periphery elements may surface alone, but crucially always and only with the interpretation of being supported by an implicit Core

Morphologically Independent/Core and Dependent/Periphery is defined here as follows:

- (24) A syntactically Core clause is a tensed (and main) clause with no overt or covert subordinating material, i.e. no complementizers
- (25) A syntactically Periphery clause is a non-Core clause; i.e. either a tensed clause with a complementizer, or an untensed/nonfinite clause

Morphological Dependent/Periphery status is, under normal usage, only interpretable if the host---the referential-access source---of the Dependent is somehow available: either overtly, or from discourse. Even repair by coercion to some fuller interpretation manages to do so only by artificially providing a host/antecedent. Hence the forms in (26) are only interpretable in a phonologically freestanding form as echos or additions to previously uttered (or otherwise established) Core forms, where the ellipsis of the Core can be readily recovered:

- (26) a. Q: When do you eat?
 A: While I read. (= [I eat]_{Core} while I read.)
- b. Q: When do you read?
 A: While I eat. (= [I read]_{Core} while I eat.)

In these cases, at least, we can see that the missing Core clauses are accessible in that they can be phonologically restored, with no change to interpretation beyond the (here irrelevant) effect of redundancy/repetition:

- (27) a. Q: When do you eat?
 A: I eat while I read.

- b. Q: When do you read?
A: I read while I eat.

There is thus a corollary to (c) here:

(ICd) (corollary of (c)): Implicational access to a Core from Periphery element is always provided by a freestanding Periphery (if it is to be fully interpreted)

We can see that the accessibility of Core clauses is obligatory for interpreting freestanding Periphery clauses from some less obvious, but quite robust interpretational facts. Namely, if we force ourselves not to interpret any implicit Core clause, and truly take the bare *while*-clauses to utterly stand alone and out of context, then they are uninterpretable:

(28) *Periphery

- a. *while I read.
b. *while I eat.

This, the original observation, establishes a core *distributional* distinction between the Core and the Periphery: that Periphery clauses truly are referential-access dependent upon some Core clause.

3.6.3 Distributional constraints on clausal dependency

We now turn to the first of the distributional constraints on clausal dependency.

(DCa) Only one Core is possible per Core-defined domain (unless coordinated, i.e. two

combine to create one)

Recall that we have the following definitions of morphologically Independent/Core and Dependent/Periphery, as relativized to clauses,

(29) A syntactically Core clause is a tensed (and main) clause with no overt or covert subordinating material, i.e. no complementizers

(30) A syntactically Periphery clause is a non-Core clause; i.e. either a tensed clause with a complementizer, or an untensed/nonfinite clause

With these we can offer a derivative outcome from (a) for Core-Periphery structure as applied to clauses:

(31) One Independent Tensed Main Clause Per Sentence Constraint (derivative)

There may be at most one syntactically Independent tensed main clause per sentence (unless coordinated); all others must be syntactically dependent.

In (32), we see that under normal interpretations, two purely juxtaposed distinct Core forms--- i.e. those unmarked by anything like *while* or other subordinators---are uninterpretable:

(32) *[Core_i]_{Core} [Core_j]_{Core} Periphery...

a. *I eat I read. (without covert/forced *and*-interpretation)

b. *I read I eat. (without covert/forced *and*-interpretation)

Only coordination, overt or covert (i.e. interpretational) can make multiple Core forms possible:

(33) [Core_i & Core_j]_{Core} Periphery...

- a. I eat and I read.
- b. I read and I eat.
- c. I eat, I read.
- d. I read, I eat.
- e. I eat I read. (with covert/forced *and*-interpretation)
- f. I read I eat. (with covert/forced *and*-interpretation)

In short, without the "expanding" effect of a coordination interpretation (with or without matching phonological manifestation), a well-formed main clause can have one and only one Core element. With the examples in (21) above, we established that the choice of eventuality to be syntacticized as the lone Core form is based on information-structural referential primacy. Lacking coordination, the only strategy available to any remaining elements is subordination, a structural pattern which carries with it an inherent referential-access dependency interpretation.

Consider the possibility that Core morphosyntactic status maps directly to a Core (i.e. primary) information-structural status (cf. the parallel suggestion for the pronominal Core, namely, 1st person). This predicts that the assignment of Core clausal status is also a matter of discourse status of that element. This we can see if we return to the example in (21), repeated here as (34):

(34) a. I read while I eat.

b. I eat while I read.

Comparing (34a) with (34b), again, the clear intuition is that the two sentences convey nearly exactly the same logical information but differ in the relative informational status of each event. What seems to be operating in the starred examples in (32), then, is a constraint against multiple uncoordinated referentially distinct elements with equally primary discourse-interpretational status. This is no doubt of a class with the familiar constraint against multiple Focus elements. This in turn intuitively seems to be from some cognitive or even mathematical source: the sheer impossibility of giving "the most attention" to more than one thing at a time. This is just speculation, however; a more precise account is beyond the scope of this work.

Again, this "constrained-to-uniqueness" effect follows from the topological Core-Periphery contrast: as "other"s, the clausal Periphery elements are not limited, while the Core ones are. Hence too:

(DCb) Periphery elements, as structural "other"s, are unlimited per Core-defined domain

(35) [Core] Periphery_i, Periphery_j, Periphery_k...

I eat [while I read] [while I sit] [while I breathe]....

i.e. any number of Periphery *while*-clauses may be tacked on to the Core main clause.

Finally, a mixture of interpretational and distributional effects also arises from this structure:

(DCc) Any Core element collocated with any number of Periphery elements is (still) interpretationally (and syntactically) treated as a Core element, never as a Periphery

(subordinate) element

(36) I eat while I read while I sit while I breathe.

The overall form in (36) is evidently Core in that it is interpretable even when truly freestanding, and cannot (37a)---unless it has overt (or covert) coordination (37b)---be collocated with another Core element:

(37) * $[\text{Core}_i]_{\text{Core}}, [\text{Core}_j]_{\text{Core}}$ Periphery... $[\text{Core}_i \ \& \ \text{Core}_j]_{\text{Core}}$ Periphery...

a. *I nod I eat while I read while I sit while I breathe.

b. I nod and I eat while I read while I sit while I breathe.

The interpretational and distributional constraints predicted to arise from the Core-Periphery structure evidently do hold for English clausal dependency. We now move on to demonstrating that these same effects replicate themselves in familiar pronominal features (§3.7), and then again in the Algonquian Proximate-Obviative contrast (§3.8).

3.7 Basic pronominal features

3.7.1 Preliminaries

As laid out in the introduction, this work claims that, as products of the Core-Periphery structure, pronominal features operate under interpretational and distributional constraints corresponding to those just seen for English clausal dependency.

3.7.2 Interpretational constraints on pronominal feature structures

Let us repeat first the interpretational constraints predicted to emerge from the iterated Core-Periphery structure (38).

- (38) Interpretational constraints stemming from the Core-Periphery structure
 - (ICa) Interpretational prominence of Core element
 - (ICb) Interpretational well-formedness of wholly freestanding, "lone" Core
 - (ICc) Morphologically Periphery elements may surface alone, but crucially always and only with the interpretation of being supported by an implicit Core
 - (ICd) (corollary of (c)): Implicational access to a Core from a Periphery element is always provided by a freestanding Periphery (if it is to be fully interpreted)

and examine how they play out for pronominal feature structure.

Translating these according to the mapping in (13), we arrive at the outcomes given in (39).

- (39) Interpretational constraints on pronominal feature structure
 - (ICa) 1st person status is the most immediately accessible (point of) reference.
 - (ICb) 1st persons can be used alone, without need for referential-access to other referents
 - (ICc) 3rd person status for a given referent is assigned only with dependent reference to the assignment of 1st and 2nd person referents...
 - (ICd) ...and so 3rd person referents implicationally provide for the existence of those referents (though they do not provide the specific index/identity of each)

We consider the empirical claims of (ICa) and (ICb) to be relatively uncontroversial, and so simply assert them here. The intent of (ICc) was discussed to some degree in §3.5.1: in the assigning of pronominal featural status (i.e. 1st, 2nd, 3rd person, etc.) to actual discourse referents, the assignment of [1] and [2] status necessarily defines all others (coordination and comparable patterns notwithstanding) as 3rd person. One can of course suggest that all discourse referents essentially start out as fundamentally 3rd person. This view is particularly plausible if one follows the notion that 3rd person is simply the absence of SAP features, and opens the door for simple accounts of use of 3rd person forms with a pragmatically effective SAP function, a phenomenon commonly encountered in the Southeast Asian linguistic area.

More formally, this is also the view elegantly captured by the top node of the Harley and Ritter model of pronominal features, i.e. the Referring Expression node: this (plus perhaps some aspect of the Individuation node) is set up as the common attribute of 3rd persons and Person persons. The Core-Periphery model does the same with the Core₂ - Periphery₂ contrast.

The crucial point with regard to the claim of (ICc) is that knowing which referents are assigned featurally and structurally 1st and 2nd person status always then entails knowing which referents are featurally and structurally 3rd person. And this is asymmetric, as the reverse is not the case. Granted, the presence of a grammatical 3rd person can imply the existence of a speech act, and thus speech act participants: a Speaker has exist to utter *She ate* and an Addressee has to exist to hear it for the 3rd person to be available to syntax. But the 3rd person only (and only indirectly) establishes the pragmatic necessity of the *existence* of 1st and 2nd person discourse referents, and not their assignment. (Here "assignment" only means the application of a formal grammatical status to a formal grammatical element: the actual real-world referent of a Speaker or Addressee could of course still remain unknown, even after the status is assigned to a certain element in linguistic structure.) This is the asymmetry of referential-access dependency with regard to pronominal features: final 3rd person status depends on the establishment of 1st and 2nd person status, but not the other way around.

3.7.3 Distributional constraints on pronominal feature structures

One interpretational constraint on pronominal feature structure comes out of the distributional constraints (40), an observation underscoring the original claim that these come from the same source.

(40) Distributional constraints

- (DCa) Only one Core is possible per Core-defined domain (unless coordinated, i.e. two combine to create one)
- (DCb) Periphery elements, as structural "other"s, are unlimited per Core-defined domain
- (DCc) Any Core element collocated with any number of Periphery elements is (still) interpretationally (and syntactically) treated as a Core element, never as a Periphery (subordinate) element

That is, the outcome of (DCa) is that each morphological 1st person is necessarily coreferent with any other in the same domain/cycle (cf. Safir 2005), which here maps to a transitive clause.

- (41) SAP coreference constraints = *[Core_i]_{Core}, [Core_j]_{Core} Periphery...
- a. *I_i saw my_j book.
 - b. *You_i saw your_j book.

The forms in (42a) and (42b) illustrated one shared workaround strategy: the surface-labeling of a referentially distinct and fundamentally 3rd person argument using the phonological index of a SAP pronoun. Such usage is familiar from contemporary pop-psychology registers.

(42) Relabeling SAPs

a. I_i need to talk about me_j now.

We_i need to talk about us_j.

You_i should worry about taking care of you_j.

b. I_i need to talk about all the different "me"_{s_j} now.

We_i need to talk about all the different "us"_{es_j}.

You_i should worry about taking care of all the different "you"_{s_j}.

The examples in (42b) demonstrate rather thickly that the object pronouns are not really SAP-featured pronouns (or even pronouns at all), because they can all take the plurals characteristic of (non-SAP) common nouns.

This is a back-door workaround, then, and not a real exception to (DCa).

A more troubling problem presents itself: (DCb) predicts that 2nd persons, as Periphery elements, should not be limited within their Core-defined domain in the number of referentially distinct elements they manifest. This is in fact possible, whenever a speaker applies the strategy of shifting speaker gaze to a new individual now established as the addressee. At first blush, it seems problematic to appeal to a seemingly extralinguistic phenomenon in the midst of formal syntactic analysis, but this is jumping the gun: it is actually the formal syntax of the system that makes this even possible. Since, as we note, no comparable strategy is available for 1st persons, as predicted by (DCa). The extreme rarity of such 2nd person usage comes not from syntactic ungrammaticality, but from the usual "unpragmaticality" of such an interpretation.

These limits contrast with the ease of having multiple referentially distinct

morphological 3rd persons within the same Core-defined domain, this coming from their status as maximally Periphery elements, i.e. what motivates distributional constraint (DCb):

(43) [Core] Periphery_i, Periphery_j, Periphery_k...

She_i needs to talk to her_j about her_k about her_i about her_m... now.

Somewhat less dramatically, distribution constraint (DCc) explains the following syntactic replacement possibilities for Core pronominals coordinated with Periphery ones; note that the data is from the author's own nonstandard/colloquial northeastern American English:

(44) Core + Periphery syntactically treated as Core, not Periphery

- a. *me and her* = Core *us* ≠ Periphery **them*
- b. *you and her* = Core *you guys* ≠ Periphery **them*

Morphosyntactic collapse of a Core SAP element together with a Periphery element results in a Core SAP plural form (as detected by substitution), rather than a Periphery plural form.

In short, interpretational and distributional constraints derived from a simple Core-Periphery structure operate both over basic pronominal features and clause types. Next, we examine the iteration of that structure that produces the Algonquian Proximate-Obviative contrasts, which we predict will exhibit the same set of constraints.

3.8 The Proximate-Obviative contrast

3.8.1 Preliminaries

A further demonstration of the syntactic flavor of the system comes from verbal forms: these contrast in morphology regarding the Proximate-Obviative statuses of their arguments (47).

(47) Proximate-Obviative contrast in argument morphology of verbal forms

a. intransitive configuration

wəlitəhəso	wəl-təh.α.əs.i-[w]
'Proximate was happy'	good-feel.LV ^{NA} .rflx.LV-W
(Speck 1918:215; CQ gloss)	

wəlitəhəsəwal	wəl-təh.α.əs.i-[w]-al
'Obviative was happy' (mosok; CQ gloss)	good-feel.LV ^{NA} .rflx.LV-W-obv

b. transitive configuration (SDα)

wətihləl	wə-ih-l.α-[w]-al
'Proximate told Obv'	3-tell-RP.DIR-W-obv

wətihləkol	wə-ih-l.ək ^w -[w]-al
'Obviative told Prox'	3-tell-RP.INV-W-obv

We have seen preliminary analysis of the morphology in (48b) in Ch. 2, and defer in-depth discussion to Ch. 4. Here we simply note that this formal alternation means that a transitive clause such as "she told him" in English has two translations in an Algonquian language. This

apparent optionality is in fact interpretationally constrained, as we will see shortly.

Still one more evidently syntactic constraint also exists:

(49) The Possessor Constraint (Rhodes 2002, 1993)

No sentence is good in which the syntax requires that a clausemate coreferent of a possessor be obviated by its possessee.

This is held to explain the most famously syntactic feature of the contrast: that Possesseees of 3rd person Possessors obligatorily carry Obviative morphology, while those with SAP Possessors do not.

(50) Obligatory obviation of Possesseees of 3rd person Possessors (PD:8)

nikawæss	'my mother'	1-mother
kikawæss	'your mother'	2-mother
wikawæssal	'h/her mother'	3-mother-Obv
*wikawæss	'h/her mother'	3-mother

= [unattested under normal 'h/her mother' interpretation]

We claim that that actual constraint is in fact the reverse: a ban on Proximate Possesseees of 3rd person Possessors. In so doing, we argue for a less language-specific approach to these effects, since all that is required is to match Obviative morphology to 3rd person referential-access dependency. Recall that in §3.5.1 we set up Obviative status as the Periphery associated with the third iteration of the Core-Periphery pattern. This means that from the referential-access chain beginning with first the 1st person and then the SAP core, for Obviatives there is still this

referentially distinct 3rd person intermediary: exactly the pattern we found restricted only to 3rd person Possessors in English. No such mediation occurs in the case of a 1st or 2nd person Possessor (the relationship is non-co-cyclic), and so no Obviation is triggered.

This effect (and comparable ones found in other possession constructions; see §4.4) is regular, inflexible, and structurally determined; hence it has been cited as the chief example of "syntactic obviation", as contrasted with the more fluid, discourse-status-sensitive alternation of Proximate-Obviative status found in other structures---e.g. either Agent or Patient may be the Proximate argument, depending on its discourse status---which is thus known as "discourse obviation" (Bruening 2005, Buszard-Welcher 2004, Hasler 2002, Brittain 2001, Aissen 1997, Goddard 1990, 1984).

The goal of this work is to unify the two. Having demonstrated above that the the RAD model alone can account for one instance of "syntactic obviation", we now go on to show that the chief characteristics of "discourse obviation" also come directly from Core-Periphery derivation, and so have the same source. To present these effects and their relation to the RAD model, we again proceed by examining the salient interpretational and distributional constraints on this contrast.

3.8.2 Interpretational constraints on the Proximate-Obviative contrast

Regarding the first interpretational constraint, i.e.

(ICa) Interpretational prominence of Core element

here the literature is quite clear on the discourse-interpretational consequences of Proximate morphosyntactic status: primacy, and prominence.

We can see this first in the interpretational effect of a change of status. Goddard 1990, 1984's analysis of the system in Meskwaki (Fox) texts introduces the notion of a "Proximate

shift"---wherein a previously Obviative element becomes Proximate---and argues that it reflects promoted discourse status. The present analysis equates these, since Proximate morphosyntactic status is the reflex of Core structural status. Which in turn gives such an element maximal prominence within the domain it defines, since all other non-coordinated referentially distinct 3rd person referents therein are necessarily referential-access dependent upon it.

Within this model, Proximate shifts are predicted to be quite common, since sudden shifts to Proximate status ought to occur any time a referent escapes from or evades the discursive grip of some other mediating referent. From there it gains Core discourse referential status its own right; and then its referential independence means it can be (and by default is) Proximate.

The literature on this point is quite uniform. Hence Dahlstrom 1996:122's "source of the point of view" subcriterion for Proximate status, along with Goddard 1990:323's observation that "a proximate shift...corresponds to a change in the point-of-view in the narrative" and his 1984:279-80 claim that it "promotes a subordinate character to coordinate status with the former main character", this last observation being echoed by Dahlstrom 1991:119 as well.

We suggest that these "point of view" effects are the most basic interpretations to come off of the relative referential-access independence of the Proximate. So Proximate status applies to referents whose relation to us the audience is not mediated through some other referent in the discourse/narrative: they are the Core of their domain. In other words, their only referential-access dependency is on the SAP Core, and not on any intermediate non-SAPs. Proximate shifts are therefore simply cases where a referent has (is given) independent discourse status, which derives from its Core 3rd person (i.e. Core₃) status. A priori, we should expect this to be the more basic, more common pattern in everyday discourse, since Obviative status explicitly requires some additional Proximate to be present, in order to trigger a third round of Core-Periphery structure.

This appears to be the case. Thomason 1995:467 observes that third persons in informal

Meskwaki narratives tend to be introduced as Proximates rather than Obviatives. By the RAD analysis, Obviatives are only required in a dependency context. Introducing a new referent is almost by default giving it Core status---unless it comes introduced via a referentially distinct pre-existing referent, one that is either an absolute Core or a relative one, and so occupies a perspective-mediating status relative to the new referent, as in the case of introducing a new 3rd person referent as the Possessee of a 3rd person.

This leads us directly to the second interpretational constraint,

(ICb) Interpretational well-formedness of wholly freestanding, "lone" Core

since the sheer fact of introduction via Proximates indicates that they are free-standing. And indeed, like English Independent clauses (the Proximates of their ilk), Algonquian Proximates, as referentially independent elements, can be totally freestanding, appearing in sentences on their own:

(51) nàwat owa sénape mečimátəyelo.

nàw.at-[w]	owa sénape	mečim-atəyel.i-[w]
long_time.LV ^{NI} -W	this ^{NA} man	always-hunt.LV ^{NA} -W

'Long ago a certain man (Prox) was always hunting.' (mətewələnəwak kəyahsopik:1)

Contrast this with the status of Periphery elements, i.e. Obviatives, whose interpretations reflect interpretational constraint (ICc):

(ICc) Morphologically Periphery elements may surface alone, but crucially always and only

with the interpretation of being supported by an implicit Core

This outcome of the Core-Periphery pattern permits a straightforward restating of Goddard 1990's explanation for the Proximate-Obviative pattern of a lengthy Meskwaki text he cites. Therein, a group of manitous engage in all of the main action, while the hero simply watches from the side, yet the manitous stay consistently Obviative for nearly the whole 34-page passage. This sustained "obviative span" (Hasler 2002's term), Goddard 1990:328 explains; "contrasts with the largely backgrounded proximate status of the hero and is an indication that it is the hero's viewing of of the manitous' activity that is significant to the narrative." This, then, is corollary (ICd):

(ICd) (corollary of (c)): Implicational access to a Core from a Periphery element is always provided by a freestanding Periphery (if it is to be fully interpreted)

Goddard's characterization thus readily translates in to present terms, with a matching prediction: since Obviative marking is a signal that the "narrative perspective/narrative access" is via the Proximate, any time we want to tell a story about 3rd persons Y and Z but constantly maintain an overt, clear sense that the whole story crucially comes as a viewing through 3rd person X, the effect on Y and Z would be exactly what we find in that text: sustained Obviative marking.

As I understand it, this is essentially what Goddard's own explanation is. The Core-Periphery analysis makes it explicit that the hero is backgrounded only in the sense of actual activity: for discourse purposes, he is constantly at the forefront, maintained as the essential intermediary, the essential middleman, because he is the Proximate through which the Obviatives' referential status derives. The advantage of the present restatement is that it is given in a form that fits with a characterization of the Proximate-Obviative contrast that applies to all of its behaviors discussed here, from the syntactic to the discourse-level---and

connects directly to the interpretive alternation observed between English Core and Periphery clauses.

We note that the striking discourse effects of this kind of extended maintenance of Obviative status in traditional narratives can give the illusion that the Proximate-Obviative contrast is a fuzzy, global discourse effect.

Recall, however, Thomason 1995:467's observation that third persons in informal Meskwaki narratives tend to be introduced as Proximates rather than Obviatives. This implies that provided that no intervening 3rd person referents are maintained, there will be constant cycle of reassignment of Proximate status, namely, to each of these newly introduced referents. And indeed, all evidence suggests that the contrast is cyclically constructed, such that a long stretch of maintained Proximate-Obviative status is simply the outcome of maintaining those statuses at each new cycle---an effort that would require some degree of speaker attention, hence the relative rarity of long stretches of fixed Obviative status in everyday speech as against its special role in traditional narrative.

Maintenance of Proximate status is therefore deeply syntactic, a chain of small local links. Further evidence for this view is the observation that Proximate-Obviative status can occasionally shift suddenly, in a manner that on the surface looks like a violation of the rule that Proximate-Obviative relations are fixed within the domain of a transitive clause. As we shall see, however, these rare violations explain readily under the proposed model of the system.

So, for example, in the following examples, all from the same narrative text, we first find typical examples where the Agent (a fox) has Proximate status, and so takes a Direct verbal complex; concomitantly, each respective Patient (a young man, women) is Obviative (52).

(52) Proximate Agent, Obviative Patient: Direct

a. ...owa k^wǎk^wsəss wətihlan iyol wskínohsal, ...

owa	k ^w αk ^w -əhs-əhs	
this ^{NA}	fox-AFF-AFF	
wə-ih-l.α-əne	iyol	wəskino-əhs-al
3-tell-RP.DIR-N	this-obv	boy-AFF-obv

'...the fox said to the young man, ...' (weči-pečihlāk sk^wəte:10)

b. owa k^wαk^wsəss wətihlan yòhi phènəmo, ...

owa	k ^w αk ^w -əhs-əhs	
this ^{NA}	fox-AFF-AFF	
wə-ih-l.α-əne	yohi	phenəm ^o -a
3-tell-RP.DIR-N	this-obvpl	woman-obvpl

'the fox told the women, ...' (weči-pečihlāk sk^wəte:18)

This is the normal pattern of Algonquian Proximate-Obviative syntax. But on occasion we encounter forms such as (53), which appear to throw a spanner into the works: the Inverse form here should in principle mean that the morphologically Proximate fox is the Patient, i.e. the one from whom fire is stolen.

(53) Proximate Agent, Obviative Patient: Inverse (!)

owa k^wǎk^wsəss wəkisi-kəmotənámkonǎ sk^wəte.

owa k^wǎk^w-əhs-əhs

this^{NA} fox-AFF-AFF

wə-kisi-kəmot-ən-am.ək^w-əne-əwǎw sk^wəte

3-PERF-steal-by_hand-RP.INV-N-≠1NApl fire

'the fox had succeeded in stealing fire from them' (weči-pečihlak sk^wəte:30)

From the gloss and from the context of story, the exact reverse of this is clearly what is intended; this is clarified formally by the *wə-...-əwǎ(w)* Possessor Morphology (see §4.2.3), which with the INV element indicates a 3rd person plural Patient, hence the 'them' of the gloss. We could chalk this up to a single isolated performance error (perhaps simply on the part of the transcriber) but another possibility presents itself: the Proximate phrase *owa k^wǎk^wsəss* 'this fox' is so topical as to be dislocated from the actual transitive clause *wəkisi-kəmotənámkonǎ* 'Obviative succeeded in stealing it from Proximate', and only indirectly corefers to the Agent thereof. This requires a quick switching of Proximate-Obviative status between the dislocated phrase and the transitive clause, but no actual violation of the transitive clause constraint. Why this phrase should be so dislocated is also clear: the fox is one of the two main co-protagonists of the text, and so would tend to pick up and maintain Proximate status.

And indeed, we have reason to believe such switches are possible, since comparable switches are found between main clause and adjunct, as in (54), where the Proximate in the first clause is the Obviative Agent of the Inverse form of the second:

(54) Proximate-Obviative reversal between main clause and adjunct

...owàtahk àk^wa àwen sèhket, etali-alqáməkoht.

owa=tahk=ak ^w a	awen	[e]-sehk.e-t
this ^{NA} =DEIC=QT	someone	C-stand.DO ^{NA} -NACj

[e]-ətal-əl-αp-am.ək^w-əht
C-Xplace-Xmanner-look-RP.INV-NAobv{NA}Cj

'Lo, there was someone standing there looking at him.' (čəwəmis:17)

Here *àwen* 'someone' is morphologically Proximate, and overtly the sole argument of the first clause (a presentational-cleft use of the Conjunct), and then again is interpreted as the Agent of the second clause, even though the Inverse morphology implies an Obviative Agent, not a Proximate one. The Patient of the second clause is the main protagonist of this story, so a sudden shift of Proximate status back to that referent is well-motivated.

Such examples are very rare in attestation: by far, the normal interpretational pattern encountered is [Prox[Obv]] for Direct forms, and [Obv[Prox]] for Inverse ones. But these apparent exceptions do have a principled basis: they require only that Proximate status be reassignable at (but not within) the clausal level. Within this system, their rarity is expected, since forms like these rather jumpy reassignments only come about from special circumstances: in (53), strong topicality means that Proximate status is taken away from the fox referent only at the very last moment, i.e. between dislocated phrase and transitive clause, while in (54), Proximate status is, again at the clause-boundary, returned to the overall more topical Patient referent of the second clause.

These observations show how the fluidity and subtlety of the discourse functions of the

Proximate-Obviative contrast nonetheless consistently obey strict syntactic distributional rules: even surface-exceptional cases like the ones just examined are not real exceptions, and only appear when special combinations of factors (e.g. the overall momentum of topicality) motivate extremely sudden shifts of Proximate and Obviative status.

3.8.3 Distributional constraints on the Proximate-Obviative contrast

Distributional constraints on the Proximate-Obviative contrast have traditionally been treated as somehow separate from interpretational ones: hence there has arisen a notion of "discourse obviation" as distinguished from "syntactic obviation", with very little attempt to explain the link between the two. In the present account, both types of constraints emerge directly from the Core vs. Periphery status of the Proximate and the Obviative respectively.

Consider the first distribution constraint:

(DCa) Only one Core is possible per Core-defined domain (unless coordinated, i.e. two combine to create one)

Like English Core clauses, Algonquian Proximates follow (DCa), such that within a given operational domain, one and only one distinct Proximate referent (deictic/referential core) is possible, coordination notwithstanding.

This constraint is a familiar one within the Algonquianist literature; most recently Brittain 2001 appeals to it as an explanation for the (apparent) violability of certain weak crossover (WCO) effects in Algonquian languages. She formulates the One Proximate Referent per Derivation Condition (OPRD), given below:

(55) The One Proximate Referent per Derivation Condition (OPRD; Brittain 2001b:74)

Wherever more than one Proximate argument occurs within the same span of discourse, these are necessarily interpreted as coreferent in order to avoid having more than one Proximate referent per derivation. A Proximate argument may be either a *wh*-phrase or a *pro*.

The essential idea of her analysis is that the coreference constraint on Proximates trumps the expected weak crossover (WCO) effect in cases such as the Western Naskapi example in (56):

(56) Weak crossover violations possible with Proximates (Brittain 2001a)

a. Possessed DP construction (Brittain 2001a:84)

Awân kâ-wâpimikut utawâsîma?

awân kâ-wâpim-ikut ut-awâs-îm-a

who Comp/Past-see(TA)-CIN.O:3/S:4 poss.3-child-poss-obv

'Who_i did his_{i/*j} child see? '

b. Possessed DP construction (Brittain 2001a:85)

Awân kâ-suwâyimikut nâpâwa mâywâyihât?

awân kâ-suwâyim-ikut nâpâw-a mâywâyihât

who Comp/Past-kiss(TA)-CIN.O:3/S:4 man-obv like(TA).CIN-O:4/S:3

'Who_i did the man she_{i/*j} likes kiss? '

Brittain notes that this WCO violability is clearly a property of Proximates only, and not of Obviatives, illustrating this with an ungrammatical WCO violation (from Plains Cree) with Obviatives:

(57) Weak crossover violations impossible with Obviatives (Blain 1997:219, cited in Brittain 2001b:82)

Awînihi nâpêw kâ-sâkihât kâ-ocemât

awîni-hi nâpêw kâ-sâkih-â-t kâ-ocem-â-t
who-obv man REL-love-dir-3 REL-kiss-dir-3

'Who_i did the man who loves her_{*i/j} kiss? '

In short, the OPRD patches WCO violations for Proximate arguments, by forcing coreference of Proximates, but does nothing for comparable Obviatives. These effects of the OPRD I analyze as nothing more than a specific case of the basic structural constraint over multiple non-coordinated referentially distinct Core elements used to derive the ill-formedness of multiple collocated Core clauses in English.

That is, to explain (32), repeated here as (58),

(58) * $[\text{Core}_i]_{\text{Core}}$ $[\text{Core}_j]_{\text{Core}}$ Periphery...

a. *I eat I read. (without covert/forced *and*-interpretation)

- b. *I read I eat. (without covert/forced *and*-interpretation)

we offered a derivative One Independent Tensed Main Clause Per Sentence Constraint (31), given here as (59),

- (59) One Independent Tensed Main Clause Per Sentence Constraint (derivative)

There may be at most one syntactically Independent tensed main clause per sentence (unless coordinated); all others must be syntactically dependent.

Relativized to the Penobscot Proximate-Obviative system, this works out as:

- (60) (Cycle-internal) Uniqueness of Core constraint: Proximate-Obviate contrast

Inasmuch as the Proximate forms the Core of its derivational cycle domain, there may be at most one Proximate referent within that domain, such that (unless coordinated with the Proximate) any element also designated as Proximate must be interpreted as referentially coconstructed with it; all others must be Obviative.

This, then, is why Proximate status can force WCO violations. Note the parallel with SAP person: referents corresponding to each particular instance of Core *I/we* must be coconstructed (and to a lesser degree, *you*)---even as unrestricted multiple *s/he/theys* with disjoint reference are possible in the very same structural domain. The Proximate coreference constraint effect (and lack thereof for Obviatives) is simply a continuation of this pattern, observed even in English pronouns.

The Core-Periphery analysis thus offers an OPRD constraint, but not as a stipulated language(family)-specific constraint with narrow application, but rather, as a much broader

constraint applying over the most basic of syntactic relations, with examples evident not only outside of Algonquian, but in two traditionally quite unrelated areas of English grammar: clause structure and pronominal interpretation.

It should be noted that the Core-Periphery analysis is also compatible with a much simpler analysis for these effects. Namely, that these WCO-violating effects appear when the transitive verb has Inverse morphology, and not when it has Direct morphology (Lin 2004, *inter alia*). As will be discussed in Ch. 4, there is much evidence to suggest that the Inverse is in its crucial features comparable to a passive. Following that analysis would mean that there is no WCO violation in these cases, i.e. (56a) and (56b) would simply correspond to the English passive structures in (61)

(61) Alternative gloss-analyses of (56a) and (56b)

- a. Who_i was seen by his_{i/*j} child?
- b. Who_i was kissed by the man she_{i/*j} likes?

This promises to be a helpful de-exoticization of the Proximate-Obviative contrast.

3.9 Problems and summary

Of course pronominal feature structures and clausal structures are not identical in all respects. So we expect some asymmetry of treatment. For example, a purely lone *while*-clause is at least produceable, but purely lone 2nd person feature structure is impossible, for independent reasons, i.e. that speech acts inherently make 1st person (the Core to 2's Periphery) available. Same again for the case of a purely "lone" 3rd person---though here purely lone 3rd person is at least imaginable: a world of disembodied utterances about 3rd persons, with no reference to

their utterers (or addressees). Such a world, operating under the same syntax, would just take some 3rd person as Core, and thus at best only be able to manage a Proximate-Obviative contrast and/or further iterations thereof.

In this chapter we have attempted to demonstrate the feasibility of accounting for pronominal features and their hierarchical effects relative to each other by assuming that the features themselves are constructed according to a simple syntax of structural derivation, the same syntax that reflects referential-access dependency. With this, we were able to account for the distinctive interpretational and distributional properties of the Proximate-Obviative contrast, and in so doing showed that there is no real difference between its purely syntactic and its purely discourse functions: both come from the same source. This is a welcome unification of properties. Beyond this we made what is perhaps the most useful demonstration of the chapter: even if the Core-Periphery model that we propose should fall by the wayside, it seems clear that the parallels between the distribution and interpretation of the Proximate-Obviative contrast on the one hand, and that of the English Independent-Dependent clausal contrast on the other, are robust. If this holds, it stands as a substantial breakthrough, in demonstrating that this otherwise seemingly Algonquian-specific contrast is subject to a set of constraints that are observable in a much broader range of languages.

4 Pronominal Features in Configuration

4.1 Introduction

4.1.1 Overview

In this chapter we examine pronominal features in configuration, demonstrating how pronominal feature hierarchies are both unnecessary and hindering to an adequate account of the effects of pronominal feature configurations on Algonquian verbal morphosyntax.

The investigation focuses on the most famous configuration-sensitive aspect of the Algonquian verbal system: the Direct-Inverse system. We start from the property of this contrast that is most problematic for standard pronominal feature hierarchy-based accounts: that the use of the Inverse for [3[1|2]] configurations (i.e. non-SAP acting on SAP) varies according to morphological clause-type.

To deal these effects in Algonquian, a feature-hierarchy-based system has to stipulate specific domains over which it applies. We show that a simpler and more richly predictive alternative account exists, one which needs no appeal to such hierarchies.

Instead, this variation can be attributed to formal properties of just one morphological clause-type, the *Independent* (Idp), which we characterize morphosyntactically as a formal possessed nominal (cf. Goddard 1974, Bloomfield 1962). The crucial properties of the Idp that we link together are two: (a) that the Idp indexes the hierarchically "highest" argument in its argument structure with the same morphology used to mark Possessors in nominal possession constructions; and (b) that the Idp consistently requires that an Inverse be used for [3[1|2]] configurations. We account for this by showing that the Idp, as a formal possession construction, instantiates a Person-Case Constraint (PCC) configuration, and so disallows a 3rd person Possessor over a SAP argument. The Inverse repairs this structure by raising the SAP

Patient (via A-movement) over the non-SAP Agent, resulting in a $[[1|2]_i[3[t_i]]]$ configuration, a SAP-topmost structure that in turn surfaces as a SAP Possessor construction that satisfies the PCC. While we offer no complete story for the PCC phenomenon itself, we show from comparison to a PCC-like effect operating between the Obviative and the Proximate in possession constructions that this aspect of the PCC ultimately derives back to the RAD model of pronominal feature derivation. We thus eliminate the need to stipulate a pronominal feature hierarchy to account for PCC and Inverse effects (cf. Wiltschko 2003).

The model so derived is able to account directly for a novel and robust observation: across Algonquian languages, variation in the use of the $[3[1|2]]$ Inverse across different morphological clause-types is unidirectionally constrained: only the Idp absolutely consistently requires an Inverse in this context, while other clause-types vary in their use of it, and for the most part lack it. This is explained as an outcome of the PCC effect inherent in the Idp, which is the only Algonquian morphological clause-type with the features of a possession construction.

With the SAP » non-SAP effects accounted for, we turn to the famous Algonquian 2 » 1 hierarchy effects, and show that the evidence for a deep 2 » 1 hierarchy is limited and contradictory. A preliminary observation is offered here suggesting that these effects may be part of a much broader pattern of descriptively anti-hierarchic effects.

4.1.2 Layout

The argumentation proceeds as follows. First, in §4.2, we introduce the primary set of morphosyntactic elements involved in the Algonquian Inverse system. These are summarized in an overview in §4.2.1. There we underline the chapter's focus on the Independent clause-type (Idp), and then set up discussion of its most distinctive morphosyntactic markers, the PWN endings (§4.2.2), along with their interaction with Possessor morphology (§4.2.3) and TA Theme Signs (§4.2.4), these latter two being the crucial elements involved in the clause-type-

sensitive distribution of the Inverse. This takes us into the core of the chapter, §4.3: the discussion of the precise nature of the Direct and Inverse light verbs. An overview in §4.3.1 lays out the claim that Inverse syntax involves A-movement of the notional direct object over the notional subject, while the Direct does not; this is an analysis inherited from Bruening 2005, whose evidence from scopal asymmetries in Passamaquoddy is examined in §4.3.2.

In §4.3.3 we turn to the *[3[1|2]] constraint driving much of the Direct-Inverse alternation, noting the core observation: that this *[3[1|2]] constraint, which requires the Inverse as a repair mechanism, is in fact consistently characteristic only of the the Idp clause-type: other morphological clause-types do not evidently require Inverse in such contexts.

We therefore then seek a motivation for the Idp-specific *[3[1|2]] constraint, and propose that this is due to the Idp's special morphosyntactic status as a formal possessed nominal, this status being evidenced by its distinctively nominal-like PWN endings and argument-marking morphology identical to that marking nominal Possessors.

From this, we suggest that the same PCC-like effect blocking *[Obv[Prox]] Possessor-Possessee configurations in nominal constructions is also what applies to the formal possession construction that is the Idp, driving Inverse morphosyntax in that context as well. We then are able to account for the *[3[1|2]] effect as pure structural homology: insofar as the Obviative has the same RAD relationship to the Proximate as the 3rd person does to SAPs, the *[3[1|2]] constraint is simply an earlier iteration of the *[Obv[Prox]] constraint, and likewise blocks a direct mapping of a 3rd person Agent to Possessor morphology over a SAP Patient. The Inverse's A-movement of the internal argument then becomes the solution to express the otherwise (Idp)-unexpressible: its A-movement allows the [1|2] arguments to surface as the Possessor morphology of the Idp form, thus permitting a visible [3[1|2]] argument-structural interpretation without creating a [3[1|2]] possession construction.

§4.3.4 takes this model and predicts an interesting and heretofore unnoticed empirical outcome: that Inverse forms are obligatory in the Idp, but not in other morphological clause-types. Other clause-types, such as the Conjunct, show no evidence of a possession construction,

and hence overall across the Algonquian family do not use an Inverse for [3[1|2]] configurations. We then note that since the model makes no active constraint against such forms, it should in principle be possible (though less likely) for an Algonquian system to have an Inverse [3[1|2]] in the Conjunct---and this is shown to be true for a small minority---but, as predicted by the PCC account of the Idp, no converse is possible: no Algonquian language is known to permit non-Inverse [3[1|2]] configurations in the Idp clause-type. The ability to predict this asymmetric directionality of this range of variation is argued to be a strength of the present model against the stipulations needed by the standard model.

Having appealed to the PCC to account for such patterns, in §4.4 we offer a preliminary proposal to reduce the inherent pronominal hierarchy aspect of the PCC generalization to RAD effects, based again on the parallel configurational properties of Obviative versus Proximate features and non-SAP versus SAP.

We then address in §4.5 the perhaps most famous aspect of the Algonquian pronominal feature hierarchy, the so-called 2 » 1 effect. There we show that this pattern is far less of a reality than it is generally made out to be. Surveying the proposed examples of this effect, we offer no final claim, but offer evidence suggesting that these may in fact reflect a broad but understudied set of patterns in the language that (descriptively) involves the referential-access dependent Periphery outcompeting its Core for marking. In other words, we show that the 2 » 1 effects could just as easily be characterized as demonstrating a (descriptive) 1 » 2 hierarchy.

In §4.6 we provide a supplement the Passamaquoddy scopal evidence discussed in §4.3.2. Here we show that even though comparable scopal evidence is no longer gatherable for Penobscot, a host of morphological facts provides at least ancillary support for the active-like syntactic characterization of the Direct and the passive-like syntax of the Inverse.

4.2 Algonquian Inverse syntax and clause-types

4.2.1 Overview

In this chapter we finally make a deeper examination of the interaction of the Inverse light verb system with morphological clause-type. As we shall see, the morphological clause-type known as the Independent (Idp) is the essential form to examine with regard to the Inverse system, because its properties in this respect set it quite apart from the other major morphological clause-types (Conjunct and Imperative), in that it alone appears to absolutely require an Inverse construction for [3[1|2]] configurations.

For this reason, in this section we lay out only the distinctive elements characterizing the Idp clause-type; those of the Conjunct and Imperative will be covered as they come.

We will begin with the most distinctive element of the Idp: the PWN elements (4.2.2), and then turn to their interaction with Possessor morphology (§4.2.3) and TA Theme Signs (LVs; §4.2.4), these latter two being the other crucial players involved in the clause-type sensitive distribution of the Inverse.

4.2.2 PWN elements

The PWN elements are distinctive to the Idp morphological clause-type: there is no clear evidence of their use in any other verbal morphological paradigm. Named after the salient consonant of their underlying forms: P (-*əp*), W (-[*w*]), N (-*əne*), their distribution is primarily determined by pronominal features of the verbal argument structure, though a notable exception is the extension of the N-ending as a marker of the subtype of the Idp known as the Subordinative (see §2.4.2). In this work we will not offer a principled mechanism for the distribution of the PWN elements, and here offer only a brief description of their form and distribution, in the order P-W-N.

P-elements only appear in configurations involving SAPs only; the presence of other arguments triggers *W-elements* or *N-elements*. Hence they are found in intransitives with SAP arguments (1a), and transitives where all the arguments are SAPs (1b).

(1) P-elements: distribution

a. Intransitive

[nə]notessepəna...	nə-note-ohs.e-əp-ənaw
'we (excl)go out...' (SDasα)	1-out-walk.DO ^{NA} -P-1pl

b. Transitive

kənamihipənač	kə-nam-h- ^o .i-əp-ənaw=č
'you will see us (SDasα)'	2-seen-cause-RP.LV ¹ -P-1pl=FUT

These are deleted word-finally, appearing only when the wordform is further suffixed:

(2) Deletion and retention of P-elements

a. Final deletion

nápič [nə]pečohse

nap-iwi=č	nə-pet-ohs.e-əp
quick-IWI=INT=FUT	1-arrive-walk.DO ^{NA} -P

'Soon I shall return [CQ: lit. 'come walking']' (Speck 1918:196)

b. Non-final retention

kəpečóhsepəsá , àla kəpečípəyepəsá .

kə-pet-ohs.e-əp-əsahan=Q ala kə-pet-pəy.e-əp-əsahan=Q

2-arrive-walk.DO^{NA}-P-SAN=Q or 2-arrive-paddle.DO^{NA}-P-SAN=Q

'Did you walk here, or come by canoe?' (S:60:56:#204)

W-elements appear when the verbal configuration involves third person arguments only of the type that do not trigger N-elements, that is, no Secondary Objects or TI notional direct objects or the Impersonal argument of an (AI) intransitive. Descriptively, it is the basic, unmarked third person element in the Idp: hence, for example, its association with a third person argument of an intransitive (3a) or the third person internal argument (Primary Object) of a transitive (3b).

Due to a number of sound changes, the *W*-element rarely surfaces as an actual /w/ in Penobscot, though it does so in other Algonquian languages---hence the name. Its active existence in Penobscot is still clear, however, from a variety of morphophonological effects it engenders: in (3a), the *W*-element changes the stem-terminal vowel /i/ to /o/; in (3b) it surfaces as a dissimilating allomorph in *-i* when following the negative concord element in *-w*, giving a combined form *-wi* 'negation-*W*'.

(3) *W*-elements: distribution and form

a. Intransitive

àpo	ap.i-[w]
'NA sits' (PD:73)	sit.LV ^{NA} -W
nètapi	nə-ap.i-əp
'I...!' (PD:73)	1-sit.LV ^{NA} -P

b. Transitive

...àtakatteč kèk^wəss kkisi-aliháwina.

αta=ka=tte=č	kek ^w əss	kə-kis-əl-h- ^o .α-w-[w]-ənaw
not=FOC=INT=FUT	what	2-can-Xmanner-cause-RP.DIR-NEG-W-1pl

'...there is nothing at all we can do with him.' (čəwəmis:10)

Finally, *N-elements* are familiar from the discussion in §2.4.2-3, to which the reader is referred regarding their use and distribution. Here we note simply that the form of the N-ending is *-ən* word-finally (4a) or before Peripheral Endings (4b); otherwise it basically appears as *-əne* before other endings (4c), though the final vowel has undergone a recent vowel-glide reduction with the Possessor morphology element *-əwα(w)*, giving *-ənα(w)* (4d).

(4) N-elements: form

a. nətələsəmən	nə-əl-əs.əm-əne
'I cut NI'	1-Xmanner-by_blade.LV ^{NA} -N

b. kəpečiptolənal səhtal. kə-pet-pVh.t.aw.əl-əne-al sahte-al
 'I bring thee some blueberries' (S:60:6) 2-arrive-grab.T-RP.LV²-N-NIpl blueberry-NIpl

c. kəsaki-məsənámənenə. kə-sak-məs-ən.əm-əne-ənaw
 'We had difficulty getting it.' 2-difficult-gotten-by_hand.LV^{NA}-N-1pl
 (weči-pečihlāk sk^wəte:35)

d. n=wəkisi-nahsahk^wháməna wətəp.

 n=wə-kis-nəhs-əhk^w-ah.am-əne-əwəw wə-təp
 then=3-PERF-attached-stick-by_GenInstr.LV^{NA}-N-≠1pl 3-head
 'They stuck his head up on on a stick.' (ANText4)

It is worth noting that the choice of PWN elements follows the reverse of the standard hierarchy, in that N-elements are used to the exclusion of W-elements, which are used to the exclusion of P-elements. Again, we offer no explanation for this effect, though we will note a comparable effect in §4.5.

The important point regarding the PWN elements is this: Goddard 1974 has suggested a nominal etymology for all three. P-elements, reconstructed as Proto-Algonquian *-Hm, are identified as cognate to an element characterizing certain archaically derived nominals:

(5) Nominal origins of the P-element: PA *-Hm (Goddard 1974, 1967:87)

a. PA *wikiwaHmi 'house' AI *wi-ki- 'dwell'

Shawnee	wi-ki-wa-p-	'house'
Penobscot	wikəwəm	'house, home' (PD:486)

b. PA *akweHmi '[blanket, robe]' AI+O *akw- (archaic of *akwi-) 'don, wear'

Menomini	ako-m	'broadcloth'
Cree	akohp	'blanket, robe'

Why these are associated with SAP-only contexts is far from clear; we note only that this element is also associated with passive/Impersonal forms in Meskwaki (Goddard 1967:85), and there is a cross-linguistically recurrent association of SAP-only pronominal configurations and passive/Impersonal ones (e.g. colloquial Finnish substitution of passive/Impersonal verbal forms for 1st person plurals, also found in the diachrony of Blackfoot).

Goddard relates the verbal W-element to two Proto-Algonquian nominal suffixes in *-w. First is an "umlauting" -w creating agent nouns off of AI, II, and TI absolute stems. These he illustrates using forms in found in Menomini (6a) and Unami (6b):

(6) Nominal origins of the W-element: umlauting PA *-w (Goddard 1974:325)

a. Menomini

anohki-w	'workman'	nominal stem: anohki-w-
anohki-w	'he works'	verbal stem: anohki-

b. Unami (morphemic analysis after Goddard)

číkənum	'turkey'
---------	----------

čik-ənúmo:k (pl.)

čik-ən- -əm-w-(-ak)

TI: 'scrape by hand' -TI_ThS-W-(-NApl)

To these we might add forms like Penobscot *təmáhk^we* 'beaver' (7b), a nominal which evidently has the transparent derivation as a direct cognate to a verbal form Munsee (7a), Penobscot having regularly dropped this word-final -w.

(7) Munsee 'cuts trees' (a) = Penobscot 'beaver' (b)

- | | | |
|----|---|-------------------------------------|
| a. | tümáhkweew | tüm-ahkw.ee-w |
| | '[NA] cut[s] down trees' (O'Meara 1996:318) | sever(ed)-wood.DO ^{NA} -?W |
| b. | təmáhk ^w e | təm-ahk ^w .e-?[W] |
| | 'beaver' (PD:464) | sever(ed)-wood.DO ^{NA} -?W |

Goddard distinguishes a separate, "non-umlauting" *-w added to TA direct themes to make NA-class nouns denoting undergoers.

(8) Non-"umlauting" *-w (Goddard 1974:325)

- | | | | |
|----|--------|-----------------|-------------------------------------|
| a. | na:naw | 'invited guest' | (animate noun denoting undergoer) |
| b. | na:naw | 'he is fetched' | (indefinite-actor or passive form)' |

c. nena·na·w 'I fetch him' (objective form)

He makes this distinction based on the observation that this objective/passive *-w does not "umlaut" a preceding reflex of PA *a to (reflex of) PA *e. The contrast between the two types of *-w is illustrated by Menomini forms such as in (9).

(9) "Umlauting" *-w (Goddard 1974:326)

a. na·nɛ·w (< Proto-Algonquian absolute form)
 'he fetches (him, absolute)'

b. na·na·w (passive form; cf. also objective form in (8c))
 'he is fetched (indefinite-actor or passive form)'

The assumption here is that the element preceding each of these *-w elements is the same in both cases, namely, the TA direct theme in PA *a, which is then umlauted or not, according to the properties of the two separate *-w elements that may follow. It is of course also possible that some intervening morpheme, expressed only as the umlauting effect, is involved; this matches better the claim we offer in §4.6, that this *a and *e are not only of the same origin, but also of the same origin as intransitive *-e 'DO'.

By either account, however, a light nominal characterization of the W-element(s) is supported, and this is all that is necessary for the present discussion, i.e. that the crucial distinctive elements of the Idp are nominal.

The N-element is a more complex matter. Goddard 1974 cites a nominal reconstruction for a verbal element in *-n, but it is not quite clear as to whether he means this to apply only to that which characterizes the Impersonal argument of an intransitive, or if it also extends to the other uses of the N-element as well (see §2.4.2). This is particularly important, since we

suggested that these may not be directly related in the first place. Fortunately, we have already offered an etymology for the latter in §2.4.5: as the grammaticalization of an affixal verb in *-ən.e* (this is in Penobscot internal reconstruction terms; at the Proto-Eastern Algonquian level, it would properly be **-ən.ē*), one proposed to mean something like 'hold'.

At first blush, this seems to run counter to the basic characterization of Idp- distinguishing PWN elements being nominal in origin. In fact, it matches our model quite well, and explains a peculiarity of the N-element to boot. First off: an affixal verb has two parts, the first of which is a plain lexical element, i.e. something certainly not yet verbal, and arguably nominal, given that nominal-associated elements like *-ess-* 'clam' readily occupy such positions. It is the second element which is the verbalizing element, e.g. the light verb *-.e* 'DO'. When the two come together, we have an affixal verb: *-ess.e* 'DO (with) clam(s)'. Thus it is quite plausible that the *-ən* of the overall *-ən.e* collocation is nominal in nature. But this is not necessarily the nominal element we are looking for.

The basic claim here is that the N-ending actually a collocation with the W-ending. That is, what we have characterized as *-əne* is in fact *-ən.e-[w]*. Basic morphophonology for the most part rarely makes this obvious, but two otherwise mysterious observations can be explained by this, and we gain a new level of simplicity in our characterization of the system: W-marking occurs when non-SAP arguments are present, with N-marking being just an extended version thereof, reflecting the 'late-incorporated Applicative' analysis of the N-element offered in §2.4.5. This characterization is what explains why the N-element is the only one of the PWN elements that ends in a vowel: the *-.e* element here is again the hard-working 'DO' light verb, operating under a W-element. Granted, in system comprised of just three elements, this could just be a coincidence. But a further peculiarity of the N-endings is also explained if we assume the presence of a W-element: the apparent emergence of a W-element effect in a context using an N-element (10).

(10) W-element effect in N-element construction

... wəsəm αta nəyona nəmohsαčiwənewinawak piləwi-alənαpak,...

wəsəm	αta	nəyona
because	not	1ple

nə-mohs-αč.i-w-əne-w-[w]-ənaw-ak	piləw-alən-αpe-ak
1-love-feel.LV ^{NA} -NEG-N-NEG-W-1pl-NApl	strange-common-man-NApl

'...because we do not love you strange people,...'(Speck 1918:236-7;)

Note first that the repetition of negation concord (-w) around the N-element is not unusual in itself: a comparable effect is also found in some Conjunct forms. What is relevant is that the repetition of the NEG element immediately following the N-element in *-əne* takes the form *-wi*, rather than *-w*. The *-wi* variant, as noted earlier in (3b), is the regular collocation of negative *-w* with the dissimilating allomorph of the W-element, *-i*. It should be noted that double-marking forms like this, which only occur when the N-element is non-final before Possessor morphology, are not consistently attested; the nature of the variation is unclear. Where they do occur, however, their form is wholly unexplained under the standard analysis; with this alternative account of the N-element, it emerges directly. It seems reasonable, then, to treat what we have heretofore called the N-element as a grammaticalized collocation of the *-ən.e* affixal verb that also includes therein being embedded under a W-element.

Recall now that we characterized the PWN elements as the distinctive morphology of the Idp clause-type. We have now seen that the two basic elements, the P-element and the W-element have a distinctively nominal character in their etymology, as does the N-element--- though only by inheritance, as it were, from the W-element---and so we now have the first

evidence of for the Idp having nominal properties.

4.2.3 Possessor morphology

The next point in favor of the analysis of the Idp as a formal possession construction is that the argument-indexing morphology---uniquely within the overall system of verbal argument marking---consists in one significant part (11a) of the same morphology that is found marking a Possessor in nominal constructions (11b).

(11) Possessor morphology: Idp and nominal possession parallel

a. Idp use of Possessor morphology

kə{nisinip}əna	kə-{nis-n.i-əp}-ənaw
'we live together as two' (mosok)	2-{two-live.LV ^{NA} -P}-1pl

b. Nominal possession use of Possessor morphology

iyo kət{ol}əna...	iyo kə-{ol}-ənaw
'this boat of ours {incl.}...' (k. & t.#1:4)	this ^{NI} 2-{canoe}-1pl

Here the verbal collocation (lexical material-LV-PWN) in (11a) and the nominal stem in (11b) are set off within braces: the morphological material on outside of the braces is what we term *Possessor morphology*. As one can see, this morphology consists of two separate affix types, Person-proclitics (12a) and plural Person suffixes (12b), whose full set and feature specifications we lay out in (12).

(12) Possessor morphology: full set and feature specifications

a. Person-proclitics

nə(t)-	Possr, 1
kə(t)-	Possr, 2
wə(t)-	Possr, (3) [Possessor only]

b. Plural Person suffixes

-əna(w)	Possr, NA, pl, 1
-əwα(w)	Possr, NA, pl

With one exception, discussed in §4.5, the Person-proclitics and Plural Person suffixes index the same argument in transitive clauses. To simplify presentation, then, from now on we will work with examples of Possessor morphology of the simplest kind, i.e. singular forms requiring only the Person-proclitics, with more complex combined forms being cited only where necessary. A similar tracking effect holds between PWN elements and Peripheral Endings, and so we will also simplify our presentation thereof accordingly, primarily using examples requiring only PWN elements, with it being understood that in the Idp clause-type, the arguments matched by the W- and N-elements in particular will trigger Peripheral Endings matching their gender/number/obviativity/absentativity feature complex.

Again, the main point to remember here is that the Idp marks certain arguments of the verbal complex with morphology identical to that used to mark the Possessor in nominal possession constructions.

4.2.4 TA Theme Signs

Traditional Algonquianist analysis recognizes elements called *Theme Signs* that affix to the TA and TI stems respectively. TA Theme Signs, for reasons that will become obvious, have typically been analyzed as object agreement (e.g. Brittain 1999), but a number of recent accounts have treated them as light verbs (especially Hirose 2003), though most just in passing (e.g. Déchaine and Reinholtz 1998 and Bruening 2005). In Ch. 2, we developed this view as part of an overall analysis that reduces all verbal constructions ones headed by a light verb.

Here we lay out the four major TA light verbs (or TA Theme Signs) just as a simple introduction; deeper discussion, particularly of the Direct and Inverse elements, is the subject of the following sections.

The first two of this set (13a) and (13b) most clearly resemble object agreement: LV¹, *-i*, appears only in constructions with a 1st person Primary Object. And correspondingly, LV², *-əl* appears only when the Primary Object is a 2nd person Primary Object---this including 1pl inclusives. Their actual distribution is a bit more complex than this, being sensitive to clause-type: this will be discussed shortly, as it is the main topic of the chapter.

Since they indicate SAP internal arguments these two form what are sometimes called the "local" set of TA Theme Signs.

(13) TA Theme Signs: "local"

a. LV¹ *-i*

...kàtìhlin↑.

kə-ih-l.i-əne

'...you tell me (Subord)'

2-tell-RP.LV¹-N

(mətewələnəwak kəyahsopik:20)

b. LV² -əɭ

...kətihlələn.	kə-ih-l.əl-əne
'...I tell you (Subord)' (mosok)	2-tell-RP.LV ² -N

Now contrast the local LVs with the LVs in (14).

These are the *Direct* and *Inverse* elements, the two light verbs most intimately tied up in the effects traditionally attributed to a pronominal feature hierarchy. Hence the standard characterization for the Direct element (DIR), -α, is that it indexes a NA Primary object being acted upon by an Agent higher up the hierarchy---as in the Proximate acting on Obviative, or 1st or 2nd person acting on a NA 3rd person. These are laid out in (14a).

The Inverse (INV), -əkw, as the name suggests, is taken to indicate the reverse: Obviative acting on Proximate, NI acting on NA, or any 3rd person acting on a SAP person, as in (14b).

(14) TA Theme Signs: Direct and Inverse

a. DIR -α

wətihləl	wə-ih-l.α-[w]-əl
'Prox told Obv' (SDasα)	3-tell-RP.DIR-W-obv

kətihlən...	kə-ih-l.α-əne
'you are to tell [them (NA)] (Subord)' (kkino:32)	2-tell-RP.DIR-N

...nətihlək	kə-ih-l.α-[w]-ək
-------------	------------------

'...I told them (NA)' 2-tell-RP.DIR-W-NApl
 (S:30:təpawəs nəkə wikohset)

b. INV -əkw

wətihləkol wə-ih-l.ək^w-[w]-al
 'Obv told Prox' (SDasα) 3-tell-RP.INV-W-obv

nətihləkw nə-ih-l.ək^w-[w]
 'he told me' 1-tell-RP.INV-W
 (kesihlət (GD version):45)

kkati-məlhatohkéwəkona wa énik^wəss.

kə-kat-məl^h-ət^o-əhk.e-aw.ək^w-[w]-ənaw wa enik^w-əhs
 2-irrealis-strange-tell-make.DO^{NA}-RP.INV-W-1pl this^{NA} ant-AFF

'The Ant is going to tell us strange news.' (enik^wəss:4)

Again, these are the traditional descriptive characterizations; the bulk of this chapter is devoted to refining and revamping these views.

It should also be noted that an element homophonous to the DIR is found in Idp constructions with an Impersonal/unspecified Agent acting on a 3rd person NA Patient (15).

(15) Idp: Impersonal Agent acting on 3rd person NA Patient: -α

tákamα	tak-am.α-[w]
'he was struck' (awehsohsak:12)	hit-RP.DIR-W

Speaking in terms of a pronominal hierarchy, the simplest account for this homophony is that this is the very same DIR morpheme, such that this kind of Agent occupies a position in the hierarchy intermediate between SAPs and non-SAPs. Hence, following Déchaine 1999a, we would revise the general pronominal feature hierarchy (16) into the form in (17).

(16) General pronominal feature hierarchy

[1|2] » NA » NAobv » NI

(17) Revised pronominal feature hierarchy

[1|2] » Impersonal Agent » NA » NAobv » NI

Here the Impersonal is positioned below the SAP arguments due to evidence from the one other LV that is associated with an Impersonal/unspecified Agent acting on NA arguments: the *-ək.e* LV found in (primarily though not exclusively Idp) constructions with an Impersonal/unspecified Agent acting on a SAP Patient (18).

(18) Idp: Impersonal Agent acting on a SAP Patient: *-ək.e*

nəmətewələnəwíhpənaləke.

nə-mətew-ələnəw-hpən-al.ək.e-əp

1-shamanic-person-hurt-RP.Imps.LV^{NA}-P

'I am bewitched.' (mətewələnəwak kəyahsopik:4)

Here we see two things. First, that the SAP argument is indexed by Possessor morphology (*nə*-'[1']), as is standard for the hierarchically highest argument). Then, we note that the first element in *-ək.e* bears some similarity to the *-ək^w* of the INV element; relating the two would make the feature hierarchy in (17) work smoothly, since INV elements are by standard analysis what signal action moving upwards in the hierarchy.

We emphasize that such characterizations are intended as purely descriptive introductions. In §4.6.3, for example, we will offer a much more in-depth analysis of the Impersonal/unspecified Agent forms in transitive configurations, and then in §4.6.5 will do the same for INV-derived affixal verbs indicating a semantically similar "diffuse" Agent.

The above exhausts the set of elements traditionally taken to be Theme Signs. However, it has long been observed that several other elements also occupy the same surface positions. First of these are the reflexive (19a) and reciprocal (19b) morphemes.

(19) Reflexive and reciprocal LVs

a. Reflexive LV in *-əs.i*

námihoso

nam-h-^o.əs.i-[w]

seen-cause-RP.reflx.LV-W

'NA sees h/hself (as a reflection or image in water or a mirror,
can be used figuratively)' (PD:295)

nənámihosi

nə-nam-h-^o.əs.i-əp

'I...'

1-seen-cause-RP.rflx.LV-P

b. Reciprocal LV in -.ət.i

mínač kənamihótipəna

mína=č kə-nam-h-^o.ət.i-əp-ənaŋ

again=FUT 2-seen-cause-RP.rcp.LV-P-1pl

'we will see each other again' (SDMC)

These not surprisingly create a verbal construction with all the inflectional traits of a single-argument verb, i.e. indexing for only one argument (unless a Secondary Object is involved). Hence these two elements are usually taken to be derivational, specifically, AI (Animate Intransitive) Finals. Attributing light verb status to such elements is not a particularly new proposal, since a parallel claim that the Italian reflexive/reciprocal element *si* reflects a light verb has been made by Folli and Harley 2002, Folli 2002, Sanz 2000, Zagona 1996, and Zubizarreta 1987.

More obscurely, an element in *-.əw.e* also occupies the immediately-post-TA-marker slot, and evidently indicates action on unspecified human Patients (20a) ; compare this with a form with the DIR light verb in (20b).

(20) *-əw.e* '[NA acts on unspecified human Patient(s)]'

a. *námihəwe*

nam-h-^o.əw.e-[w]

seen-cause-RP.HumPat.LV^{NA}-W

'NA witnesses; NA sees as a witness; NA sees other people, or things [actual physical vision]' (PD:295)

b. *nənámiħ*

nənam-h-^o.α-[w]

'I see NA' (PD:294)

1-seen-cause-RP.DIR-W

The overall derivation bears some structural resemblance to the T-element-based derivation of certain TI stems laid out in §2.4.8, combined with the derivation for property-denoting notional direct objects given in §2.3.3. Here we might tentatively analyze the *-əw.e* element as another unergative affixal verb based on *-e* 'DO', with the *-əw* being a property-denoting element indicating a general/nonspecific human Patient. As such, this element is somewhat less obviously inflectional, and indeed, as the gloss in (20) suggests, constructions in *-əw.e* have a tendency to pick up non-literal (i.e. idiomatic) uses, as expected if they are semi-lexical, as this account suggests.

That argument-structure-derivational elements seem to share the same morphological slot as putative object agreement (i.e. TA LVs/Theme Signs; cf. TA LVs in archaic Algonquian nominal derivations, discussed in §4.2.2) is the loudest hint that all of these elements might better be understood as semi-lexical, that is, as light verbs, as per the general LV-based analysis introduced in §2.2.1. And again, the treatment of of TA Theme Signs as LVs rather than

agreement heads is the implicit analysis of Bruening 2005, Hirose 2003, and Déchaine & Reinholtz 1998. This said, these two elements could perhaps still be read as object agreement; hence in §4.6 we will offer examples of the reciprocal appearing in semi-productive lexical derivation, something that fits with a LV analysis but not an object agreement one.

This concludes our introduction to the LVs associated with TA (Relational Predicate) constructions. We put aside for the moment the more immediately transparent LV¹ and LV² light verbs (they will return!) and focus on a sharper characterization of the DIR and INV elements, as these form the base of the Algonquian Inverse system.

4.3 Direct and Inverse

4.3.1 Overview

Our basic claim in this section is that Inverse syntax involves passive-like A-movement of the notional direct object over the notional subject, while the Direct does not, and instead has a simple active-like structure, i.e. no such movement. This point is crucial to our account of the distribution of the Inverse, because it specifically raises certain pronominal-feature arguments into a position to consistently manifest as Possessor morphology. In §4.3.2 we will lay out evidence for this A-movement account from Bruening's analysis of Passamaquoddy scope asymmetries.

From there, in §4.3.3 we take the new observation of this work, that the *[3[1|2]] constraint requiring the Inverse is in fact primarily characteristic only of the the Idp clause-type, and argue that it comes about because the Idp, as a formal possessed nominal, is subject to the same PCC-like effect blocking *[Obv[Prox]] Possessor-Possessee configurations in plain nominals. This we do by following the structural homology of *Prox : Obv :: SAP : non-SAP* provided by the RAD analysis of Ch. 3: the co-cyclic referential-access dependent Obviative cannot c-command a Proximate in a possession construction; and so neither can a non-SAP do

so with a SAP. Since in verbal constructions, only the Idp has this structure, only the Idp requires the A-movement of the Inverse to shift the [3 [1|2]] structure to a [[1|2]_i][3[t_i]] one, i.e. one that keeps the SAP rather than the non-SAP as formal Possessor (traces are used here only descriptively).

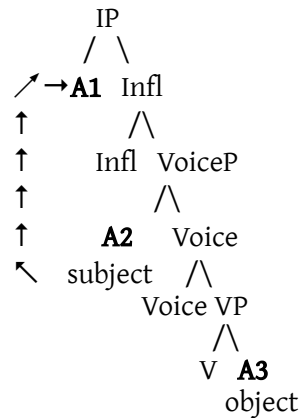
As we show in §4.3.4, this predicts a further new observation: only Idp clause-types actually consistently require Inverse forms for [3[1|2]] configurations. This we confirm by examining Conjunct forms, which happily exhibit surface violations of a putative *[3[1|2]] constraint, because they do not use a formal possession construction. In this way we account for the unidirectional nature of cross-Algonquian variation in the use of the Inverse across clause-types: the [3[1|2]] Inverse should in principle be possible in the Conjunct, just not strongly motivated (and therefore comparatively rare), while it should be obligatory in the Idp. These claims are shown to be borne out.

4.3.2 The Inverse as A-movement

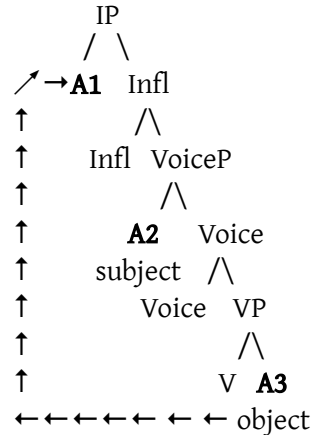
The claim that the Inverse resembles a passive in one form or another is not new. It follows a long analytical tradition (i.e. especially Rhodes 1994, Perlmutter and Rhodes 1988, Rhodes 1976, and LeSourd 1976) whose most recent exponent is Bruening 2005, 2001. The basic structures claimed for the Direct and Inverse follow Bruening 2005, and are given in (21).

(21) Direct and Inverse structures (after Bruening 2005:3; arrow notation mine)

a. Direct



b. Inverse



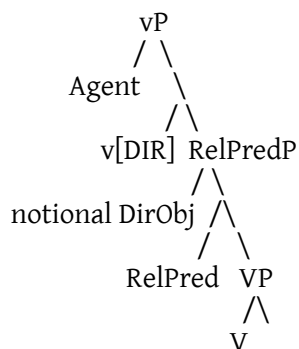
In short, the Direct has a simple raising of subject out of VP (21a), while the Inverse has a raising of object out of VP (21b): essentially the familiar structures of actives versus passives.

The present claim maintains the basic structural relations of the Bruening 2005 analysis, updating it according to the more generalized RPLV model proposed and defended in Ch. 2.

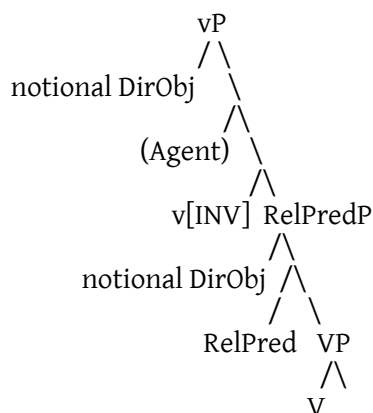
Translating the Bruening 2005 (and predecessors) approach into the terms of the generalized RP.LV structure, we have the structures in (22). The primary difference is that we treat the Primary Object as being introduced via the RP (here as "RelPred" so as not to be misread as a phrase-level element). We also make no assumptions about internal arguments' positions relative to the lexical V, i.e whether there is a [V[O]] or [O[V]] constituent does not seem to be readily demonstrable or relevant with current data available (though see Bruening and Rackowski 2001 for some possible evidence from the Wampanoag objective-absolute contrast).

(22) Direct and Inverse syntax

a. Direct syntax



b. Inverse syntax



Note that in (22b) we represent the A-movement of the notional direct object (in a DAS system, just calling it a direct object seems misleading) by copying. We assume deletion of the lower copy, but the exact mechanics are not particularly clear in these (descriptively) pronominal argument languages; what will be crucial is evidence that these lower and upper copies have interpretational consequences.

More significantly, we do not and cannot assume that the Agent argument is introduced in VP. This is because we argue that in TA constructions the notional direct object is introduced by a higher element, the Relational Predicate. If the Agent were introduced in VP, we would have inverse scope-causing structures in all TA constructions. As Bruening's evidence will suggest that this is not the case, we assume that in the DIR construction, the external argument, i.e. the Agent, is consistently introduced by the immediately higher LV, as in the DIR structure in (22a).

In the case of the Inverse, we make a strong claim that the notional direct object is ultimately the topmost argument of the Inverse LV, such that it ends up being reflected in Possessor morphology. Our claim about the position of the Agent is left more open. Here we recognize three main options that are consistent with the evidence of direct and inverse scope readings for the INV.

First is that the INV simultaneously introduces the Agent (giving an Agent » notional direct object scope reading) and then attracts the notional direct object above it, giving the inverse scope reading (notional direct object » Agent). The status of this type of data is not clear, however; hence we also have a second possibility, that the Agent in such forms is in fact not introduced by a main-spine head, but rather, only by a RelPredP-level oblique adjunct. A further alternative maintaining the inverse scope reading would be for the raised notional direct object, as the sole argument of the Voice-like INV head, to be the sole argument able to raise to whatever functional level results in marking via Possessor morphology, while the Agent is introduced below it as a vP-level adjunct. The crucial difference here is whether or not there

is evidence for the Agent of an Inverse construction as an oblique. In §2.4.2 we saw such evidence for the Inverse used in NI Agents of TI; here we will not attempt to push the claim further for NA agents of Inverse constructions, though some speculation in that direction will be offered in §4.6.4. Here we concern ourselves first with a review of Bruening 2005's evidence for the A-movement analysis of the Inverse.

Bruening 2005's fundamental support for the structural claims summarized in (21) comes from scopal interpretations. Roughly speaking, in Passamaquoddy, Direct forms have active scope (Agent » Patient), and Inverse forms have passive scope (Patient » Agent, Agent » Patient).

Bruening first establishes that scope and variable binding are indeed structural diagnostics, observing that a quantifier in a higher clause can bind a pronoun in a lower clause, but not the reverse. Not surprisingly then, a quantifier in an adjunct clause is similarly unable to bind a pronoun in the matrix clause. From this he concludes that cross-clausal variable binding requires *c-command*. Going on to establish the existence of WCO effects cross-clausally, he then examines two types of constructions for which no Inverse is available, namely, the TI and AI+O constructions (see Ch. 2). For both he determines that subjects may bind a pronoun contained within the object, but objects may not bind a pronoun in the subject (i.e. WCO effects result): that is, once again, variable binding requires *c-command*.

With this as background, he reaches the crucial examples: how Direct and Inverse constructions fare in such tests. As expected from the proposed structures, Direct forms follow the pattern of TI and AI+O syntax: subject quantifiers may bind a pronoun contained within the object, as in (23),

(23) Direct: subject quantifiers binding object pronouns (Bruening 2005:12:(31))

- a. Kenoq olu yatte=hc wen 't-uwehkah-a-l 't-epeskom-akonu-m-ol.
 however Emph each=Fut who 3-use-Dir-Obv 3-play.ball-Nom-Poss-Obv

'But each one₁ will use his₁ own ball.' (Mitchell 1921/1976b, line 55)

- b. Nit msi=te kehsi-htit ehpic-ik '-pun-a-ni-ya
then all=Emph be.many-3PConj woman-3P 3-put-Dir-N-3P

(')-nican-sis-uwa sip-uk apc welaqiwik.
3-child-Dim-3P.ObvP river-Loc again in.evening

'That night, every one of the women₁ puts her₁ child into the river.'
(Mitchell 1921/1976a, line 70)

while an object quantifier may not bind a variable in the subject (24).

- (24) Direct: object quantifiers unable to bind into subjects (Bruening 2005:13:(33))

[_{NP} Skitap musqitaham-ac-il] '-koti-tqon-a-l psi=te wen-il.
man hate-3Conj-PartObv 3-Fut-arrest-Dir-Obv all=Emph someone-Obv

'A man that he*₁ hates will arrest everyone₁.'

Here he notes specifically that once again, this also leads to WCO effects in questions (25).

- (25) Direct: object quantifiers unable to bind into subjects: WCO effect (Bruening
2005:13:(34b))

*Wen-ihi tan wen welamsot-ok micimi=te qessey-a-htit?

who-ObvP TAN who IC.believe.in-3Conj always=Emph IC.respect-Dir-3PConj

'Who₁ does whoever believes in them₁ always respect?'

The scopal possibilities of Direct forms, then, suggest a simple active-like structure.

The Inverse, however, does exactly what its passive-like syntax would predict. Notional objects can bind into their notional subject, as in (26),

(26) Inverse: object quantifiers able to bind into subjects (Bruening 2005:13:(36))

a. Kat=op wen (')-nokol-oku-wihi-l w-oli-witapi-hil.

Neg=would who 3-leave-Inv-Neg-Obv 3-good-friend-Obv

'His₁ best friend would abandon no one₁.'

b. Yatte wen pilsqehsis '-kis-cem-ku-l w-ikuwoss-ol.

each who girl 3-Perf-kiss-Inv-Obv 3-mother-Obv

'Her₁ mother kissed each girl₁.'

c. Psi=te wen '-kosiciy-uku-l w-ikuwoss-ol.

all=Emph who 3-know-Inv-Obv 3-mother-Obv

'His₁ mother knows everyone₁.'

and WCO effects in questions are circumvented (27).

(27) Inverse: WCO effects circumvented (Bruening 2005:14:(37))

a. Wen pihce w-itapihi-l nekol-iht kcihku-k?
who long.ago 3-friend-Obv IC.leave-3ConjInv forest-Loc

'Who₁ did his₁ friend abandon in the forest a long time ago?'

b. Wen pihce wenitaham-iht '-qoss-ol?
who long.ago IC.forget.about-3ConjInv 3-son-Obv

'Who₁ did his₁ son forget about long ago?'

(Cf. also Dahlstrom 1986:56-57; and especially Brittain 2001a, who achieves this by stipulating a coreference constraint on co-clausal Proximates.)

With these effects in tow, Bruening finally excludes the possibility that the Inverse simply reverses all thematic roles, noting that the structural step implied by an A-movement account should mean that even in the Inverse, the subject can still bind into the object. This he finds to be the case (28).

(28) Inverse: subject can bind into object (Bruening 2005:14:(39))

Ma=te keq utomeya-ku-w-on [_{NP} tepelto-k].
Neg=Emph what 3.bother-Inv-Neg-N IC.own.TI-3Conj

'Nothing₁ bothers the one who owns it₁.'

In short, Bruening 2005 provides substantial evidence that in Passamaquoddy, A-movement is what distinguishes the Inverse, and indeed, he concludes that appeal to a separate participant hierarchy is not necessary. This is not direct evidence that the same is the case for instances where the notional object of the Inverse is a SAP, of course. However, nor do we have evidence suggesting otherwise, so the more conservative choice is to assume that these Inverse constructions, being morphologically parallel to non-SAP Inverse forms, have parallel syntax as well.

Bruening does however explicitly note that the motivation for this SAP A-movement (more precisely, SAP and configurational Proximate A-movement) is still unexplained. This is also an issue for Aissen 1997, who argues from an OT Syntax perspective that the Inverse is used for argument structures wherein the (pronominal-featural) participant hierarchy (1,2 » 3 » Obv » Inan) is not aligned with the relational hierarchy (subject » primary object). This approach too is forced to stipulate a participant hierarchy, and does not actually motivate or derive its effects independently.

In other words, previous accounts of the Inverse can set up the formal mechanisms for the [3[1|2]] Inverse in the Idp, but not offer a motivation for those mechanisms, let alone for their clause-type sensitivity.

4.3.3 Motivating the [3[1|2]] Inverse: PCC constraints on the Idp

We now offer such a motivation, in the form of the following specific claim: the Idp clause type requires the Inverse for [3[1|2]] configurations because the Idp is a formal possession structure, and as such exhibits Person-Case Constraints on its possible Possessors. Algonquian languages are known to block surface configurations of [Obv[Prox]], i.e. where an Obviative is the Possessor of a Proximate Possessee (Rhodes 2002, 1993), both in nominal possession constructions, and also in the more obviously PCC-like ditransitive configuration of Goal (=

Possessor) and Theme (= Possessee). After the RAD model offered in Ch. 3, a [3[1|2]] configuration has the same structural makeup as an [Obv[Prox]] one, i.e. that of a Periphery element above its co-cyclic Core. We therefore suggest that a PCC-based ban on the former extends to a ban on the latter.

The advantage of this claim is that it explains a curious fact about Algonquian Inverse systems: their Inverse requirements more often than not do not operate across all clause types. In fact, the obligatory [3[1|2]] Inverse, a most distinctive aspect of the Inverse system, is almost exclusively a feature of just the Idp morphological clause-type. Other morphological clause-types do not generally exhibit this effect, and operate from a rather less exotic model. That is, Conjunct and Imperative morphology generally manifest a cross-linguistically more familiar pattern for multiple-argument marking: one dedicated morpheme marking the external argument, and another for the internal argument.

This is exemplified with the forms given in (29), which are from the Conjunct, a morphological clause-type strongly associated with relativization.

(29) Absence of Inverse in [3[1|2]] configuration in Conjunct (Penobscot)

- | | | |
|----|--------------------------------------|----------------------------------|
| a. | sehkawit | [e]-sehk-aw.i-t |
| | 'he who has conquered me' (PD:421) | C-stand-RP.LV ¹ -NACj |
| b. | sèhkosk | [e]-sehk-aw.əl-t |
| | 'he who has conquered thee' (PD:421) | C-stand-RP.LV ² -NACj |

Here the surface collocations of *-i-t* and *-.əs-k* (< *-.əl-t*) have SAP Patient light verbs *-.i* '[LV¹]' and *-.əl* '[LV²]' evidently internal to the marker *-t* 'NACj' indicating a ([+NA]) 3rd person Agent: in other words, a decidedly ordinary multiple-argument-marking pattern, and precisely what does not occur in the Idp clause-type.

This cheerful violation of the *[3[1|2]] constraint that holds so consistently over the Idp obtains in these other clause-types for the most part regardless of the configuration of Person and non-Person arguments involved. While a degree of hierarchy-like feature competition can be seen in the case of plural Person internal arguments (see §4.5), overall there is no basic *[3[1|2]]-driven Inversion. Herein the use of the Inverse is in general restricted just to marking [Obv [Prox]] and [NI [NA]] configurations, cases which motivate independently simply as basic A-movement structures, i.e. both being essentially passives.

Here, then, is the question: how can a system that ostensibly has a deep-seated pronominal feature hierarchy tolerate such frequent and basic departure therefrom?

First off, we dispense with any notion of a fundamental, globally-active pronominal feature hierarchy of a purely morphological kind. This opens the road to predicting what forms can exist and what forms cannot by using a more decentralized, construction-specific analysis. This, we will see, better matches the heterogeneity of the observed facts, while maintaining a deeper kind of analytical consistency.

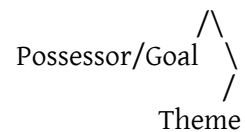
In this particular case we account for the specific [3[1|2]]-Inverse-triggering properties of the Idp clause-type by noting independent reasons for believing it to instantiate a PCC structure.

Recall first the evidence presented in §4.2: first that the crucially distinctive morphology of the Idp---specifically, the PWN elements---is nominal in origin, and continues to be so (§4.2.2). And then independent of that analysis, we also found that the other main component of the Idp's argument-indexing morphology is formally identical to that marking a Possessor in nominal possession constructions. The result: the distinctive combination of Possessor morphology and PWN elements that formally characterizes the Idp paradigm also strongly suggests that it is morphosyntactically a possessed nominalized verb.

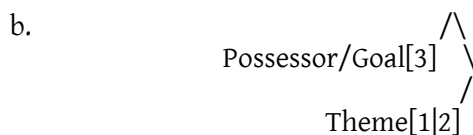
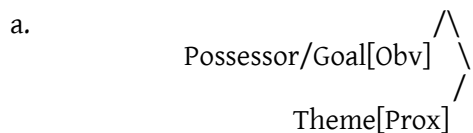
As a possession construction, the Idp is predicted to exhibit the same constraints on the possible pronominal features of Possessor and Possessee seen in nominal possession constructions and ditransitive Goal-Theme configurations: Proximate Possesseees may not have

Obviative Possessors, and SAP Possesseees may not have non-SAP Possessors. That is, the basic Possessor/Goal-Theme configuration that is the natural environment of PCC effects, given in (30), cannot have the featural structures *[Obv[Prox]] or *[3[1|2]] given in (31).

(30) Basic PCC-sensitive configuration



(31) Ill-formed PCC constructions



Two observations emerge here. First is that the structures in (31) are precisely the thematic configurations triggering the use of the Inverse in the Idp clause-type. Second is that this predicts that forms such as in (32) would be impossible; and are indeed they are unattested.

(32) Idp forms ruled out by PCC

a. Idp: *[3[1]]

*wə-...-i

3-...-LV¹

'NA acts on me'

b. Idp: *[3[2]]

*wə-...-əl

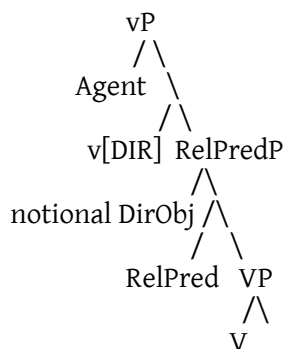
3-...-LV²

'NA acts on you'

This is because wə- is a 3rd person Possessor morpheme, which would be asymmetrically c-commanding a Person argument element, i.e. the LV¹ and LV² elements here, and so violating the PCC constraint on Possession constructions.

Thus the paradigmatic gap reported in (32) has a principled basis: it is forced by the Possessor morphology of the Idp, and ultimately is what leads the use of the [3[1|2]] Inverse in the Idp paradigm. The reason for this is simple. Consider a construction involving no A-movement, i.e. one based around the DIR morpheme (33).

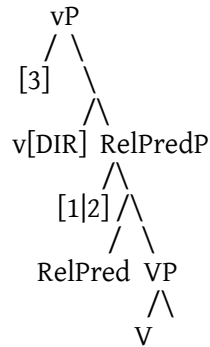
(33) Direct syntax



Should this construction have a [3[1|2]] configuration (34), it will be ill-formed in the Idp clause-

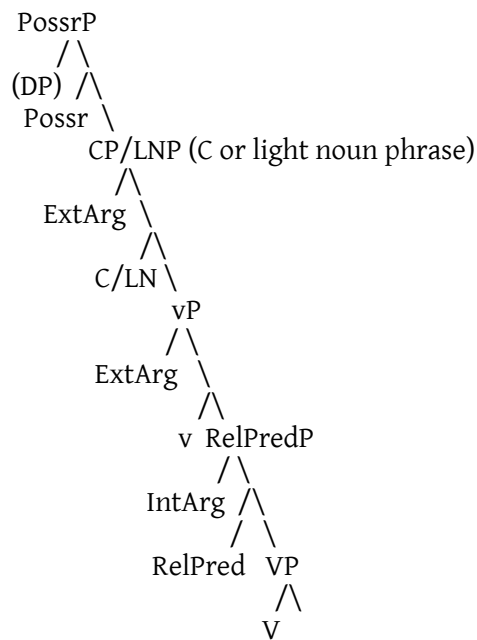
type (and the Idp clause-type alone).

(34) Direct syntax: *[3 [1|2]] configuration



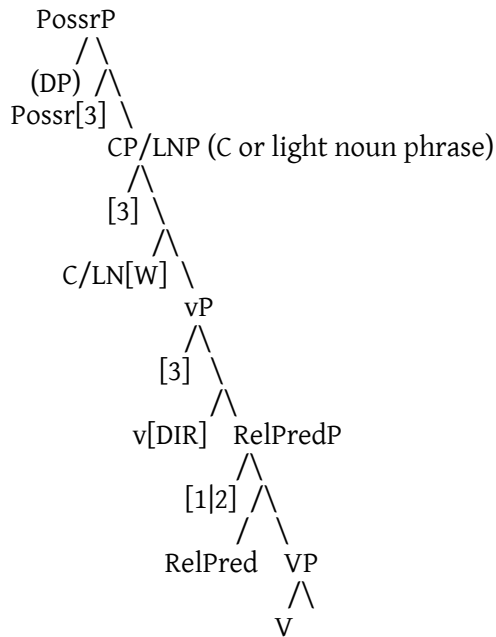
This is because the Idp is a nominal structure, with light noun head in a position roughly equivalent to that of a complementizer head, onto which is added a functional layer providing expression of the Possessor morphology (35). From here we make a minimal assumption: that the voice-like properties of DIR and INV morphemes offer up the topmost argument (i.e. the external Argument) of the vP for expression via Possessor morphology, either directly via local movement or through some sort of Agree relation; the exact mechanism is not crucial.

(35) Idp syntax



Possessor marking is by this account always for the topmost, external argument. Because the Idp is in its fundamental syntax still just a Possessor-Possessee construction, in a [3[1|2]] Direct construction, this would result in a 3rd person Possessor over a structure immediately containing a SAP argument (36).

(36) Idp Direct syntax: *[3 [1|2]] configuration

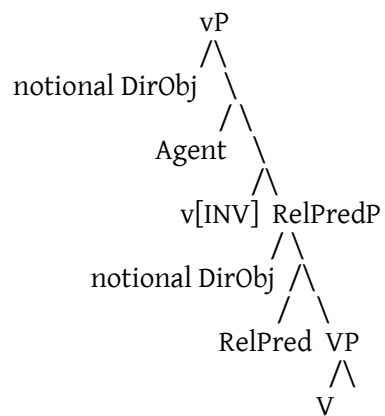


Which is precisely the type of PCC-violating structure ruled out in (31) and (32), and never attested in Algonquian systems.

Such a constraint presents a serious functional problem for the Idp clause-type, since all languages presumably need some means to convey the thematic configurations of a 3rd person acting on a 1st or 2nd person.

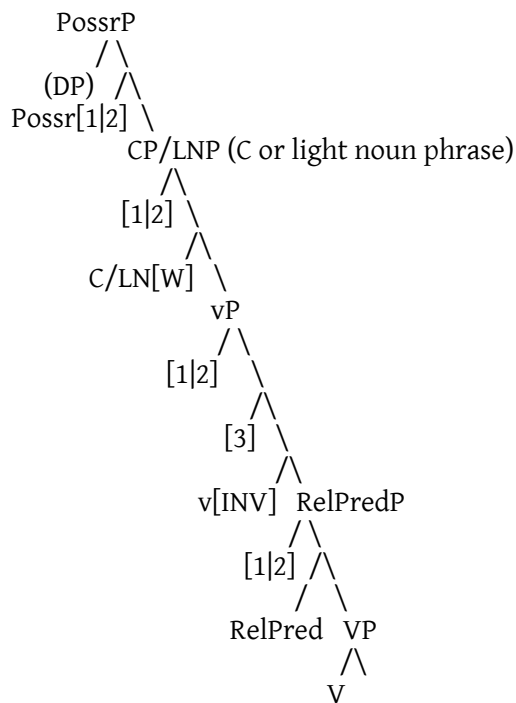
Enter the Inverse (37).

(37) Inverse syntax



The Inverse is a perfect repair strategy for the PCC constraint holding over the *Idp*, since it preserves the thematic relations of (36) even as its the A-movement of the internal argument (the Primary Object) over the Agent restores a topmost *vP* configuration that satisfies PCC constraints. That is, the post-A-movement configuration it produces---[[1|2]_i[3[t_i]]] ---makes the SAP argument most directly available to Possessor morphology level, and so produces a final form that does not violate PCC constraints, since a Person argument is not asymmetrically c-commanded by a non-Person argument (38).

(38) Idp Inverse syntax: [[1|2|3 [1|2]]] configuration



This both motivates the Inverse and predicts its morphological form. For a concrete example of a form so derived, consider (39), the Inverse form *nətihlək^w* 'NA told me'.

Here the element *nə-* is a 1st person marker corresponding the 1st person Possessor morpheme in *nə-*; it indexes the internal argument, as expected from the syntax in (38) above. Rounding out the pattern is the (covert) W-element, which is the distinct marker of the Idp clause-type.

(39) Idp Inverse

a. Idp: [1|3|1]] structure, morphologically realized

nətihlək^w

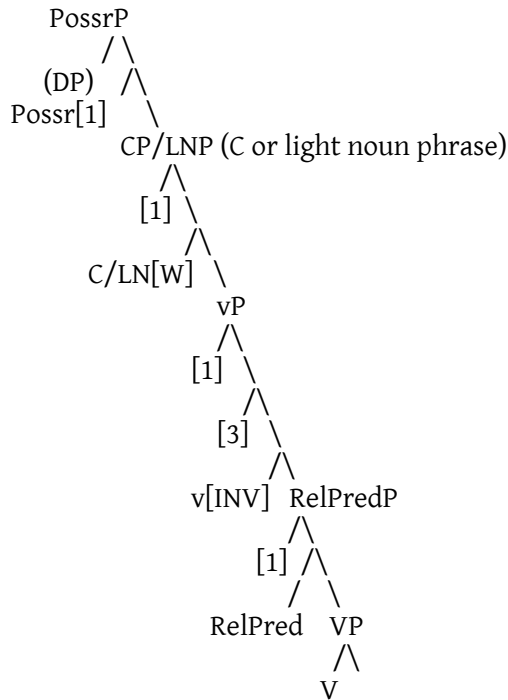
'he told me'

nə-ih-l.ək^w-[w]

1-tell-RP.INV-W

(kesihlat (GD version):45)

b. Idp: [1[3[1]]] structure, syntactically analyzed



This is the essence of the present model of the Direct-Inverse system: it is a morphological clause-type based on a nominalized verb, hardly a rarity the world, though more commonly seen in subordinative clauses.

An immediate challenge, of course, is the rich variety of such languages with nominalized verbs and Possessor- or genitive-type argument marking which nonetheless exhibit no obvious PCC-driven Inverse effects. Examples that come immediately to mind include Turkish and Itzaj Maya (Hofling 2000); but the same issue can be illustrated simply with English possessed transitive gerundives (40): these clearly show what would appear to be PCC-violating configurations of non-SAP Possessor over SAP internal argument.

(40) English possessed transitive gerundives

- a. her seeing (of) me
- b. her seeing (of) you

I do not claim to have a full solution to this problem. I can however offer as a preliminary speculation that the absence of PCC effects in such constructions has to do with how tightly the internal argument is actually bound up with the verbal complex. Free accusative- or dative-marked object pronominals, for example suggest a degree of configurational independence that may be sufficient to break up the tight locality associated with PCC constraints. Hence, for example, the fact that overt adpositional introduction of Goal arguments is the cross-linguistically common periphrastic workaround for thematic configurations that would otherwise be subject to PCC effects.

To explain this specifically for the Algonquian system would require two things: first, a principled account of what actually drives Person-Case Constraint effects, something I have not been able to glean from the present literature on the subject; and second, a better sense of the relationship between transitive LVs and the PWN endings, since this is the locus of the configuration we hold to be exhibiting PCC effects.

To suggest that the crucial factors lie here, in this seemingly language-specific configuration of elements, is actually an attractive claim. This is because a good account of Inverse patterns should also offer some explanation as to why Inverse-driving constraints are relatively rare among the languages of the world that exhibit multiple argument marking: presumably they are not the default pattern, but instead, emerge only when rather special sets of conditions come together. Whether such sets of conditions are even uniform across all languages characterized having an Inverse system is still another question entirely, and one comparable (and possibly related) to the question of whether all transitivity systems characterized as ergative(-absolute) are uniform in the morphosyntactic parameters driving them.

To summarize, then, we emphasize that the PCC constraint is not and cannot be a constraint against [3[1|2]] argument structures at the most basic argument structure level: otherwise all languages would always require Inverse constructions from the get-go. Instead, this constraint is tied directly to the the syntax of possession, which, as it manifests in ditransitives, is well-established as a source of PCC effects. Such that the Idp, as a formal nominal possession structure, is expected to require an alternative means (the Inverse) to surface-realize thematic configurations such as [3[1|2]] and [Obv[Prox]] whose direct expression would incur PCC violations.

4.3.4 Unidirectionality of variation in clause-type-sensitive use of the Inverse

Following the previous claim, we also predict an interesting and heretofore unnoticed empirical outcome: while [3[1|2]] Inverse forms are obligatory in the Idp (due to the PCC constraint), they need not be so in other clause-types. Other clause-types, such as the Conjunct, show no evidence of a possession construction, and hence overall across the Algonquian family do not use an Inverse for [3[1|2]] configurations, as we have seen demonstrated in Penobscot.

Note, however, that this model makes no active constraint against the use of [3[1|2]] Inverses in the Conjunct or other clause type; the only strict prediction is that no Idp-type pattern will permit non-Inverse [3[1|2]] configurations. This appears to be the case.

Now since there is no necessary reverse requirement, i.e. no constraint stating that that Conjuncts (and other non-Idp morphological clause-types) cannot have Inverses for [3[1|2]] configuration, in principle they too might be able to use the same (or similar) construction as the Idp. Here there would just be no active or direct syntactic obligation to do so, and thus no strong motivation for such forms to emerge.

This is also what we find. The majority of Algonquian languages have a TA Conjunct pattern as in (29) above, i.e. with argument-structural interpretational [3[1|2]] configurations realizing morphosyntactically as surface-direct morphological reflections of [3[1|2]]

configurations.

This represents what is evidently the Proto-Algonquian pattern (Goddard 1979). But a few Algonquian verbal systems, namely certain variants of Nishnaabemwin (Ojibwe) and Wampanaog (Massachusetts), have innovated by extending a derived "pseudo-Inverse" in the Conjunct as well. That is, in these systems, the pattern of an Inverse for a [3[1|2]] configuration does extend into the Conjunct. The exact morphological structure of the resulting collocation is as follows:

(41) Pseudo-Inverse (Inverse-derived Conjunct with [3[1|2]] configuration)

[TA collocation].INV-?LV-SAPCj

We will address the "?LV" element in a moment. For now, just note that this morphological template essentially follows what is found in the Idp: an INV light verb, and then external argument morphology (here, SAPCj, i.e. 1sCj, 2pCj, etc.) for the hierarchically higher argument (the SAP argument) acting as a descriptive parallel to the Possessor morphology found for such arguments in the Idp.

Such patterns are shown in (42), where we give (from each of these two languages/ variants) examples of this pattern for 1s and 2s Patients of NA Agents in the first column. For comparative purposes we offer in (42c) an example of an Idp [3[1|2]] Inverse from Penobscot.

In examining these forms, it is worthwhile to note that these same languages exhibit variant forms (be they dialectal or otherwise) that follow directly the more common Algonquian pattern in which a [3[1|2]] configuration surfaces directly; compare these to their Penobscot cognates in (29) above.

(42) Pseudo-Inverse (after Goddard and Bragdon 1988:556; Valentine 2001:295)

Wp = Wampanoag (Massachusetts)

Nsb = Nishnaabemwin (Ojibwe, Ojibway, Ojibwa)

a. Conjunct: [3[1]]

RP.INV-?LV-1sCj

variant:

RP.LV¹-NACj

Wp RP.ukw-ē-y(ôn)

RP.i-t

Nsb RP.ig(w)-o-yaanh

RP.i-d

'(that) NA acts on me'

b. Conjunct: [3[2]]

RP.INV-?LV-2sCj

variant:

RP.LV²-NACj

Wp -ukw-ē-yan

(not attested)

Nsb -ig(w)-o-yan

V-.ø-k

'(that) NA acts on you'

c. Penobscot Idp [3[1|2]] Inverse comparandum to (42a)

nətihlək^w

nə-ih-l.ək^w-[w]

'he told me'

1-tell-RP.INV-W

(kesihlat (GD version):45)

Under the present account, these Inverse-based patterns are predicted to be permissible, but not deeply or directly motivated, and hence, *ceteris paribus*, also rarer than the non-Inverse pattern. It is therefore worth asking how they come to exist at all. A simple explanation is that they are the result of paradigmatic extension of the high-frequency Idp forms---which are, after all, the usual forms for main clauses---into other clause-types. The proposed model predicts this range of flexibility, since such extensions are permitted by the syntax, while not actually being required or driven by a truly syntactic constraint; this furthermore explains why non-Inverse [3[1|2]] patterns can still be found in related dialects and/or as variants, since either pattern is permitted in these morphological clause-types.

Contrast this with a model based on a deeply-integrated morphological pronominal hierarchy system: a complex system would have to be set up to ensure that stipulated and contradictory hierarchy-driven morphologization rules are maintained for different morphological clause-types. And we would lose any explanatory power regarding why comparable converse variation is lacking in the Idp clause-type.

This said, it should be made clear that no more deeply motivated analysis beyond paradigmatic extension why this minority pattern has been offered in the literature (see Goddard 1979), and this admittedly weak account is also the best that I can offer. Furthermore, the contribution or significance of the additional element following the INV element remains unexplained, although here the present model can at least offer the prediction that it will have LV properties; hence the tentative label "?LV".

In spite of this uncertainty, the (so far) unique advantage of the proposed account remains: that this model permits the possibility of such variation in the Conjunct and Imperative while strictly forbidding a parallel range of variation in the Idp forms.

And again, this latter constraint appears to be borne out empirically. That is,

Algonquian languages, to the best of my knowledge, never attest the logical converse of the minority pattern, as these would be the forms we saw ruled out due to PCC constraints in (36); they are repeated here as (43).

(43) Unattested Idp logical converses of pseudo-Inverses

a. Idp: *[3[1]]

*wə-...-i

3-...-LV¹

'NA acts on me'

b. Idp: *[3[2]]

*wə-...-ə1

3-...-LV²

'NA acts on you'

As mentioned earlier, such forms are wholly unattested and unreported for Algonquian languages, with the corresponding interpretational configurations being realized via Inverse constructions:

(44) Idp [3[1[2]] Inverse constructions

a. Idp: *[3[1]] → [1[3[1]]]

nə-...-ək^w

1-...-.INV

'NA acts on me'

b. Idp: *[3[2]] → [2[3[2]]]

kə-...-ək^w

2-...-.INV

'NA acts on you'

To deal with this constraint on the Idp, standard accounts can only appeal to the stipulated pronominal feature hierarchy to explain the absence of the forms in (43), and then add an additional stipulation that those same hierarchical effects can be negated in other morphological clause-types---but can be brought back in languages with pseudo-Inverse patterns.

This account, on the other hand, has already explained the absence of the forms in (43) and their replacement with those in (44)---along with the possibility of pseudo-Inverse-type variation, and predicting its unidirectionality to boot---using nothing more than what is already needed to account for PCC constraints.

4.4 Ferreting out hidden pronominal feature hierarchies: RAD and PCC

By this point we have somewhat reduced the stipulative nature of pronominal hierarchy effects in Algonquian transitive constructions, and eliminated the particular problems of restricting their effects (particularly with regard to the full distribution of the Inverse) only to certain clause-types.

But a problem remains. In appealing to PCC effects, we are still just hiding a pronominal feature hierarchy inside another label. We need do this no more. The nature of the Algonquian Proximate-Obviative contrast makes it possible to see where Possessor-constructional *[3[1]2]] constraints come from, without appeal to any stipulated pronominal feature hierarchy.

Consider this first. Assume that we are correct in proposing, as we did in Ch. 3, that the Proximate-Obviative contrast is just a further iteration of the Core-Periphery derivation of the [[[1]2]3] pronominal feature contrast. This means that the Obviative is to the Proximate what the non-SAP is to the SAP: a Periphery to its co-cyclic Core.

Now we know of a PCC-type constraint of the form *[Obv[Prox]]; this is the Possessor Constraint, given in (45) as originally formulated by Rhodes 1993.

(45) The Possessor Constraint (Rhodes 2002, 1993)

No sentence is good in which the syntax requires that a clausemate coreferent of a possessor be obviated by its possessee.

Translating from his original Relational Grammar terms, we can restate this as: an Obviative cannot asymmetrically c-command a clausemate Proximate.

(46) Updated Possessor Constraint

An Obviative cannot asymmetrically c-command a clausemate Proximate in a

possession construction.

(Similar constraints are proposed in Aissen 1997:716 and Bruening 2005:3.)

Now run this whole analogy in reverse: if the (updated) Possessor Constraint blocks [Obv[Prox]] configurations in nominal possession constructions, it is reasonable to speculate that a similar constraint should block its RAD-model parallel, the [3[1|2]] configuration.

Unfortunately, however, we do not have good direct evidence for or against [3[1|2]] configurations in nominal possession constructions, since the ill-formedness of nominal structures with pronominal Possesseees might be due to any number of causes.

The only place where [Obv[Prox]] and [3[1|2]] configurations might still be compared is ditransitive Goal-Theme constructions. Here again we do have a *[Obv[Prox]] effect: Secondary Objects (see §2.4.2-3) are always Obviative with respect to any other ([+NA]) 3rd person Primary Object argument of the verbal complex. Hence in (47), the Goal (glossed "NA") is Proximate, while the Theme *nátémisal* 'my dog' is Obviative.

(47) Penobscot DAS competition: [+NA] Theme of ditransitive (PD:280)

nəmílanal nátémisal	nə-m-l.α-əne-al	nə-em-s-al
'I give NA my dog'	1-give-RP.DIR-N-obv	1-dog-DIM-obv

And then, as predicted, we also find a basic *[3[1|2]] constraint: in other words, the most familiar instantiation of PCC, one well known from studies of Romance argument-marking clitics (Bonet 1995, 1994, 1991), but found in a wide range of languages (almost universally, in fact; see also Anagnostopoulou 2003, Boeckx 2000, Bonet op cit.).

Such is the depth of the ditransitive PCC constraint in Algonquian that it is not even possible to construct pronounceable morphological forms to test for the possibility of PCC violations in these structures. Thus no SAP Secondary objects are ever attested (in ditransitives

or otherwise), except (and this only in certain languages) via syntactic workarounds such as the use of a SAP-possessed dummy 3rd person as a Secondary Object (48).

(48) Munsee-Unami (Delaware; Goddard 1979:116; morphemic analysis by CQ)

mpe:t·a·k·wənéyɔ khák·ay

nə-pēt-aw.əkw-ənē-əwāw k-Vhakay

1-arrive-RP.INV-N-≠1pl 2-body

'they brought you to me'

Here the Theme element is *khák·ay*, which is quite transparently 'your body'; compare cognate Penobscot *nhàke* 'my body [living body only, of human or animal]', *khàke* 'your ...' (PD:7).

Interestingly, these pronominals are also used for reflexives (Goddard 1979:45; see also Goddard and Bragdon 1990 for the same pattern in Wampanoag (Massachusetts)), even though the usage above evidently shows that they cannot be only strict anaphors in the traditional Condition A sense, since they need not have an overt antecedent.

We can now use the shared property of a *[Obv[Prox]] constraint as the empirical bridge between nominal possession constructions and ditransitive Possessor/Goal-Theme constructions.

Recall first that the RAD model sets up [Obv[Prox]] and [3[1|2]] as parallel configurations, both being instances of co-cyclic [Periphery[Core]] configurations. The first of these is clearly banned both in nominal possession constructions (this is the Possessor Constraint), and both are banned in the semantically comparable Possessor/Goal-Theme configuration of ditransitives (this is the Person-Case Constraint). If we had of clear evidence

for a *[3[1|2]] effect in nominal possession constructions, we could immediately collapse the two constraints into one.

Suppose we simply do this: co-cyclic [Periphery[Core]] configurations are what are banned in PCC configurations. The result is the system we have developed: taking the Idp clause-type to instantiate a formal nominal possession construction as well, we derive with no further stipulation the constraints against surface expression of the thematic Agents of *[Obv[Prox]] and *[3[1|2]] constructions via Possessor morphology---i.e. what we claim to drive the Inverse system of that clause-type.

This is, again, the core claim of this work.

The difference now is that in restating it in Core-Periphery structural terms, we make it possible to move the basis of explanation away from stipulated pronominal feature hierarchies and towards the compositional referential-access dependency structure proposed to underly such effects. That is, the co-cyclic [Periphery[Core]] structure that gives in *[Obv[Prox]] and *[3[1|2]] effects in PCC contexts derives from nothing more than the constraints on the compositional interpretation of the syntactic elements involved in a possession construction like *her mother*. The constraints that we have up until now labeled PCC effects for expository clarity can all be traced back to referential-access dependency.

This is not a complete story, of course. Left unresolved is what actually predictively characterizes a PCC construction. Only knowing that can we build an account for why such structures consistently require that referential access dependents must be c-commanded (and cannot c-command) their referential-access sources. This remains an open question.

What we have done here, however, is show that what drives these PCC patterns is not necessarily something inherently special about the features of SAP arguments, but instead, something constraining the possible structural dependencies between referential-access dependents and the elements they depend on for referential access. A full story of the mapping of referential access dependency syntax to familiar configurational syntax is the next logical goal, but for now, we have at least reduced a wide range of problems into one.

4.5 Apparent 2 » 1 effects in Algonquian desubstantiated

Collapsing two problems into one is also the outcome of the present analysis's take on perhaps the most famous feature of Algonquian morphosyntax: the observed 2 » 1 pronominal hierarchy. In this section we also do not offer a full account for the phenomenon, but simply show first that the traditional 2 » 1 characterization is empirically inadequate, and suggest the possibility that the evidence indicating a 2 » 1 hierarchy may actually read as evidence for a (descriptive) 1 » 2 pattern, insofar as it may follow an independently established set of morphological patterns of referential-access dependents (Peripheries) outcompeting their referential-access sources (co-cyclic Cores) for marking.

The major point of evidence typically cited to in favor of the typologically marked 2 » 1 hierarchy is to be seen in the Penobscot forms in (49), where the proclitic *kə-* appears whenever the argument structure has a 2nd person argument, be it a configuration of 1st and 2nd persons (49a) or an intransitive (49b).

(49) Algonquian 2 » 1 effects: Idp(Idc)

a.	kənamihol	kə-nam-h- ^o .əl-əp
	'I see you' (SDMC)	2-seen-cause-RP.LV ² -P
	kənamihi	kə-nam-h- ^o .i-əp
	'you see me' (SDMC)	2-seen-cause-RP.LV ¹ -P
b.	kətəli-wisi...	kə-əl-wis.i-əp
	'you are called...' (SDMC)	2-Xmanner-be_called.LV ^{NA} -P

nətəli-wisi...

nə-əl-wis.i-əp

'I am called...' (SDMC)

1-Xmanner-be_called.LV^{NA}-P

These forms are generally viewed as justifying the claim of a 2 » 1 pronominal hierarchy, since a comparable surface 1 » 2 system would be expected to use 1st person *nə-* rather than 2nd person *kə-* in both forms, a pattern not reported for any Algonquian languages. Algonquian languages are rather famous for the distinctiveness of these evident morphological 2 » 1 effects, though certain Mixe-Zoquean languages are described in similar terms (Zavala 2004).

A second apparent 2 » 1 effect is not generally discussed in the Algonquianist literature. This is the case of the Conjunct form of a [3[1pli]] configuration (50a,b). Here the Conjunct ending is *-ak^w*, the general Conjunct ending for the inclusive 1st person plural external argument (50c).

(50) Algonquian 2 » 1 effects: non-IdpIdc (Conjunct)

a. (kəyona) takáməlak^we

kəyona tak-am.əl-ak^w-e

1pli hit-RP.LV²-1pliCj-NIabs

'if NA hits us (incl.)' (S:ConjunctNotebook)

b. tepeləməlak^w

[e]-təp-el-əm.əl-ak^w

C-attended_to-emote-RP.LV²-1pliCj

'he who owns us (incl.) = the Christian God' (PolisLetter; CQ gloss)

- c. nəči wikəyak^w... ni=či [e]-wik.i-ak^w
'there we shall live...' (Speck13:275) that^{NI}=FUT C-reside.LV^{NA}-1pliCj
- d. nemihola [e]-nam-h-^o.əl-a
'that I see you' (SDMC) C-seen-cause-RP.LV²-1sCj
- e. kək^wəpeht mēhsi kəya wičóhkeməyan' .
kek^w=əpa=eht [e]-mVhs- kəya -wit-əhk.e-(w)-m.i-an'
what=POT=UCT C-Xreason- 2s -with-make.DO^{NA}-(W)-RP.LV¹-2sCj=Q

'for what reason should you help me?' (čəwəmis:18)

The first question is why there is no obvious morphological representation of the NA Agent argument at all: the *-əl* '[LV²]' reflects the 2nd person feature of the inclusive 1st person plural internal argument, with the inclusive 1st person plural Conjunct element *-ak^w* doubling the entire feature specification of that same argument.

This is relatively simple to explain: there is no reason for it to affect the LV, and the inclusive 1st person plural Conjunct ending *-ak^w* readily outcompetes the relatively underspecified NA Conjunct ending in *-t*. This requires no appeal to a pronominal hierarchy per se, just the basic notion (commonly attributed to Benveniste 1966) that 3rd persons are featurally empty, combined with the notion of output specificity (cf. Wunderlich 1996, cited in

Déchaine 1999b, and also in the Distributed Morphology literature, especially Halle 1997), i.e. the principle by which (among other things) wordforms with more featural specifications block less-marked ones competing for the same slot. In (51) we give an informal characterization of the featural competition.

(51) Featural competition between Conjunct endings

- a. -ak^w Cj, NA, 1, 2, pl
- b. -t Cj, NA

What does evidently require appeal to a 2 » 1 stipulation is the choice of the LV. In principle, use of the LV¹ form *-i*, rather than the attested LV² in *-.əl*, should be logically equivalent, since both the 1st and 2nd person components of the 1pl inclusive are ultimately rendered visible by the *-ak^w* affix, and either Person-marked LV would provide the link to internal argument structural/thematic status. Yet the collocation **-i-ak^w* is simply not attested: only *-.əl-ak^w*.

So this sets up a second evident 2 » 1 effect. What might drive these 2 » 1 effects?

Outside of a set of discourse-/pragmatics-based models (e.g. Heath 1998), two formal-feature-based proposals have been suggested to account for Algonquian 2 » 1 effects. Most recently, Bejar and Rezac 2003 in their model of Agree relations account for the 2 » 1 pattern in Ojibwe by assuming that languages can parameterize for whether they take [Speaker] or [Addressee] as the target of the relevant Probe. This, however, simply shifts the 2 » 1 descriptive observation into formal terms, and makes no positive predictions for Ojibwe beyond that same observation. This, the current state of our understanding of these effects, is further compromised by a problem of descriptive adequacy: the Algonquian 2 » 1 generalization for the most part does not even hold all the way through an entire clause-type paradigm.

The most salient example of this has been noted by Déchaine 1999a and Delancey 1981, and recently again by Bruening 2005: in the Idp, 1pl Possessor elements outcompete 2pl

Possessor elements, giving rise to a 1 » 2 effect. This can be seen in the Penobscot examples in (52).

(52)	1pl » 2pl effects	(adapted from S:72:105)
a.	kə-----əlapəna '1pl [acts on] 2(sg/pl)'	kə-[----].əl-əp-ənaw 2-[stem collocation].LV ² -P-1pl
	kə-----ipəna '2 (sg/pl) [acts on] 1pl'	kə-[----].i-əp-ənaw 2-[stem collocation].LV ¹ -P-1pl
b.	kə-----əlapα '1sg [acts on] 2pl'	kə-[----].əl-əp-əwαw 2-[stem collocation].LV ² -P-≠1NApl
	kə-----ipα '2pl [acts on] 1sg'	kə-[----].i-əp-əwαw 2-[stem collocation].LV ¹ -P-≠1NApl

That is, the forms in (52a) are ambiguous for number of the 2nd person argument. This is because the position immediately following the P-element here, which can in principle take either of the two plural Person Possessor endings in (52), always takes the 1pl Possessor ending in -əna(w) (53a) over that associated with the 2pl Possessor, i.e. -əwα(w) (53b).

(53) Possessor endings: Plural Person

- | | | |
|----|---------|------------------|
| a. | -əna(w) | Possr, NA, pl, 1 |
| b. | -əwα(w) | Possr, NA, pl |

This is the most common kind of example cited against the generality of a 2 » 1 pattern in Algonquian languages. However, as the featural specification offered in (54b) suggests, the element in $-\text{əw}\alpha(w)$ need not and in fact should not be analyzed as carrying a [2] feature. This is because it is also found as a plural 3rd person Possessor ending:

(54) $-\text{əw}\alpha(w)$ for the plural 3rd person Possessor

$w\text{ənehsew}\alpha k\text{án}\text{əw}\alpha$	$w\text{ə-nehs.e-w-}\alpha k.\text{an-}\text{əw}\alpha w$
'their breath' (ADElicitations)	3-breathe.DO ^{NA} -W-nominalizer.LN-≠1NApl

b. $\dots w\text{əníh}l\text{aw}\alpha l$	$w\text{ə-nəh-l.}\alpha\text{-[w]-}\text{əw}\alpha w\text{-al}$
'they (Prox) killed NA (Obv)' (ANText2)	3-kill-RP.DIR-W-≠1NApl-obv

This usage suggests that $-\text{əw}\alpha(w)$ is better characterized as an underspecified [+NA] plural Possessor marker; hence we have throughout abbreviated it as "≠1pl". Treating these in standard Distributed Morphology terms, the more richly specified $-\text{əw}\alpha(w)$ will, by Halle 1997's Subset Principle, outcompete the lesser-specified $-\text{əw}\alpha(w)$ for insertion. No 1pl » 2pl stipulation is required; and so this alternation is perhaps not a true test of 1pl versus 2pl morphology.

A more promising place to test such a possible claim would be the Conjunct paradigm, as it has well-defined 1pl and 2pl elements that again compete for one morphological slot (55).

(55) Conjunct plural Persons

a. $-\text{ek}$	Cj, NA, pl, 1
-----------------	---------------

b. -ak^w Cj, NA, (pl), 2, 1

c. -ek^w Cj, NA, pl, 2

d. -həti-t Cj, NA, pl

Here we see completely fused morphemes for all (though some analysis may be possible), and most saliently, no common point between the 2pl (55c) and the NApl (55d). Unfortunately, the data for the relevant Penobscot transitive configuration, i.e. the Conjunct forms with the [2pl [1ple]] argument structure corresponding to (52) are scanty; what forms do exist are uncertain.

There is an additional problem of localization: looking back at the examples in (52), one can note that even in cases with descriptive 1pl » 2pl, i.e. (52a), the Person Proclitic is consistently *kə-* '[2]' where it might just as readily be *nə-* '[1]'. That opposite person feature hierarchy effects occur within the two margins of a single morphological form suggests that a simple across-the-board language-family-specific parameterization of a 2 » 1 featural hierarchy is not a promising approach.

What we can offer here is only a limited observation, but a useful one. That is, there is another pattern in the Idp system that appears to preferentially mark the hierarchically "lower" argument: choice of Peripheral endings. When a Primary and a Secondary Object compete for representation via Peripheral endings, the Secondary Object, which is otherwise lower on the descriptive hierarchy (i.e. always Obviative to a Primary Object Proximate, for example; cf. the Possessor Constraint), standardly wins out (56).

(56) Secondary Object outcompetes Primary Object for Peripheral endings

wəkəmotənəmáwəna, təmáhk^wewa.

wə-kəmot-ən.əm-aw.α-əne-a təm-αhk^w.e-ewe-a.
 3-theft-by_hand.LV^{NA}-RP.DIR-N-obvpl sever-wood.DO^{NA}-pelt-obvpl

'he steals beaver skins from him' (S:60:44:(147))

By the present analysis, this is preferential marking of the referential-access dependent. What drives this anti-hierarchic effect is unclear, but it may possibly be motivated by what we also observe in marking of clause-type in English: there the Dependent is more morphologically marked than the Independent (see Ch. 3). For Algonquian verbal morphology, at least, the crucial restriction here is that this preferentiality only applies between co-cyclic pairs of Core and Periphery (hence, for example, we do not get 3rd person marking outcompeting 1st or 2nd person). Under this view, what have traditionally been viewed as at least surface 2 » 1 effects might therefore actually show a 1 » 2 ranking, at least in a descriptive sense. This is not a solution to the problem, but, particularly in the light of the previous evidence, it does suggest that the simple 2 » 1 characterization is both inadequate and possibly unnecessary to account for the relative distribution of the *kə-* and *nə-* Person Proclitics and the *-əl* and *-i* local light verbs.

4.6 Non-scopal evidence for Direct and Inverse syntax

4.6.1 Overview

This section is an addendum of sorts, motivated by a basic methodological concern. Bruening (2005, 2001)'s analysis of the Direct and Inverse contrast, upon which we developed a large part of the argumentation of this chapter, is based on scope interpretation data from Passamaquoddy. This is a language which on all available evidence appears to have nearly

completely identical morphosyntax with Penobscot---but which has the distinct advantage of having a pool of native speakers still available and willing to participate generativist-style syntactic investigation. Appealing to Passamaquoddy is thus a valuable means to fill in gaps left in the attestation of Penobscot paradigms, but of course it can never confirm that Penobscot does in fact follow the same pattern.

Tacitly assuming that the properties of verbal systems of closely related Algonquian languages will by and large be the same is here a necessity borne of practical constraints, but it is part of a larger problem in the analysis of Algonquian morphosyntax.

It is true that Algonquian languages in general all seem to have recognizable Direct and Inverse morphemes, and that the form and distribution of these elements seems strikingly similar and consistent across the family. However, no published survey exists that verifies that the various claims made for the Direct-Inverse system made based on data from specific Algonquian languages do in fact apply across the board in the whole family. Algonquianist literature as a whole tends towards making this assumption. On the one hand, this leads helpfully general claims that are amenable to disproving; but at the same time, this is a tendency tantamount to assuming that all Romance pronominal clitic systems have identical surface syntactic properties. The difference of course being that surveys rigorously testing the latter claim have been done, and have indeed identified interesting points of variation.

It is from this discomfort that we here supplement Bruening 2005's arguments for our shared basic model of Direct and Inverse syntax with evidence from outside the area of scope-interpretation data. That is, since scope facts are no longer freely testable in Penobscot, we seek further evidence that the Direct and Inverse in that language have the syntactic structures that Bruening has established for Passamaquoddy.

Such evidence comes from a close reading of morphology. The evidence available here is not as striking and immediately conclusive as scope facts would be, but it does provide a rich range of patterns that explain coherently if the Direct-Inverse contrast is assumed to have the same overall structure as the active-passive contrast.

We do this by showing that the Direct and Inverse elements each have strong morphological affinities with related but more evidently lexical predicates that carry canonical semantics associated with their respective A-movement syntax. That is, we show that the Direct is related to forms with Agent-prominent active-unergative readings, and the Inverse to a set of forms with Patient-prominent passive-unaccusative ones.

The line of discussion begins in §4.6.2, where we lay out the basic claim that the Direct construction has the same core syntax as other Agent-prominent forms, in significant contrast to the other TA Theme Signs (i.e. the Inverse and LV¹ and LV² elements), whose Patient-sensitive status suggests an unaccusative orientation. In §4.6.3, we first remove an apparent challenge to this claim: the Idp form of the use of the Direct with the Impersonal Agent acting on a 3rd person [+NA] Patient appears to suggest that the Direct element is also a Patient-sensitive element, but on closer examination of the full set of facts, we show it to better fit the view that the Direct is an Agent-prominent head.

From there, in §4.6.4 we offer a tentative claim as to how the Direct has come to be so, suggesting from a suspicious conspiracy of independently established alternations that the Direct light verb originally derives from the unergative DO light verb, which we take to be the epitome of an Agent-prominent head.

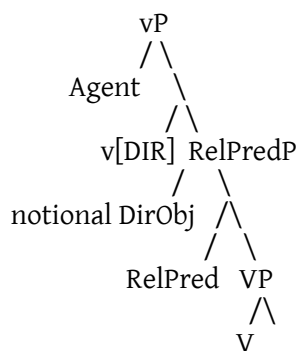
In §4.6.5 we show the converse for the Inverse: two lexically-constrained constructions in Penobscot that have an element homophonous with the Inverse *-əkw* are examined, and shown to have interpretational properties of precisely the kind associated with Agent-demoting structures.

These two lines of evidence on their own are insufficient to establish the syntax of the Direct and Inverse as firmly as Bruening has done; but insofar as they form an otherwise heterogenous complex of facts explained readily by the same analysis, they provide valuable ancillary support for this view, and have the added benefit of being demonstrable even within the limited range of morphosyntactic data available for Penobscot.

4.6.2 The Direct: almost but not quite another layer of antipassive

Recall that the structure proposed for the Direct is quite simple. The notional direct object is, as per DAS, introduced by the Relational Predicate, and the Agent/external argument by the light verb Merged directly above it (57).

(57) Direct syntax



What may not be quite obvious from the tree in (57) is a very distinct claim: the Direct element is unlike the other TA-associated light verbs in matching the external argument rather than the internal argument. This is in fact the prediction of the RP.LV analysis of TAs proposed in Ch. 2: all other things being equal, the outermost light verb should be introducing (and gender-feature-matching) the outermost full argument, and nothing more---just as it does for intransitives, TIs, and AI+Os (see Ch. 2).

There is a question of burden of proof for this, however, since heretofore, the "Theme Sign" light verbs have far all been described as unaccusative predicates. This is because the majority rather clearly featurally match the notional direct object. In the case of the LV¹ and LV² light verbs, this occurs rather directly, as they quite unambiguously match the 1st and 2nd person features of their respective internal arguments (58).

(58) TA-associated light verbs matching Person features of internal arguments

a. Idp: LV¹-.i

...kətihlin↑.

kə-ih-l.i-əne

'...you tell me (Subord)'

2-tell-RP.LV¹-N

(mətewələnəwak kəyahsopik:20)

b. Conj: LV¹ -i

...nəya etali-wičihleməyan.

nəya [e]-ətal-wit-hl.α-w-m.i-an

1s C-Xplace-with-move.LV^{NA}-W-RP.LV¹-2sCj

'[where] you [shall always] be staying with me' (kkino:32)

c. Idp: LV²-.əl

...kətihlələn.

kə-ih-l.əl-əne

'...I tell you (Subord)' (mosok)

2-tell-RP.LV²-N

d. Conj: LV² -.əl

...wečič-kisi-wičóhkeməla.

[e]-wət--č-kis-wit-əhk.e-(w)-m.əl-a

C-Xfrom==FUT-can-with-make.DO^{NA}-(W)-RP.LV²-1sCj

'...in order that I can help you' (čəwəmis:17)

In the case of the Inverse element, this is a bit more indirect: the Inverse shows no clear evidence of feature-matching with an internal argument, but, as we laid out in §4.3.3, its use is clearly triggered by the nature of that argument.

It is therefore necessary to show some clear evidence that the Direct element is unique among the TA Theme Signs in having an Agent-oriented syntax, that is, one in which the structurally topmost argument, the one first available to C-level agreement processes (i.e. Possessor morphology), is the Agent.

4.6.3 Impersonal Agent Direct

An immediate challenge to this claim must first be faced. Suspicion is immediately cast on an Agent-oriented characterization of the Direct light verb by the Idp instantiation of an Impersonal Agent acting on a [+NA] 3rd person Primary Object (59a).

(59) IdpIdc: Impersonal Agent acting on a [+NA] 3rd person Primary Object

- | | | |
|----|---------------------------------|-----------------|
| a. | tákamα | tak-am.α-[w] |
| | 'he was struck' (awehsohsak:12) | hit-RP.DIR-W |
| b. | nətákamα | nə-tak-am.α-[w] |
| | 'I hit NA, strike NA' (PD:447) | 1-hit-RP.DIR-W |

- | | | |
|----|---|--------------------|
| c. | ...nòtawāk... | not-aw.α-[w]-ak |
| | '...they are heard...' (ssihsihk ^w ak:5) | hear-RP.DIR-W-NApl |

A comparison of (59a) with a form taking a SAP Agent (59b) shows that the only morphological difference between the two is that the latter has overt Possessor morphology, *nə-*, which marks the 1st person Agent. Otherwise, in both cases, the notional direct object is, by standard Algonquianist assumptions, understood to be reflected in the Direct and W morphemes, and, whenever overt, Peripheral Endings as well, as exemplified in (59c), in the form of the Peripheral Ending *-ak* 'NApl'.

In other words, there is no morphological evidence for the notional object raising to a subject position: the Direct looks like object agreement, and so could readily be read as a Patient-matching light verb, i.e. one that introduces the [+NA] internal argument. Such a view is attractive in its simplicity.

An even simpler account, however, is that the configuration in (59a) has exactly the same syntax as that of (59b). That is, the Impersonal argument (represented below in (60) as [Arb], following McCloskey 2005) in an Agent configuration is morphologically represented in the Idp as a zero element that simply occupies the very same set of slots as corresponding overt Person morphology, i.e. that of (59b) above. In other words, we might update (59) above as (60) below:

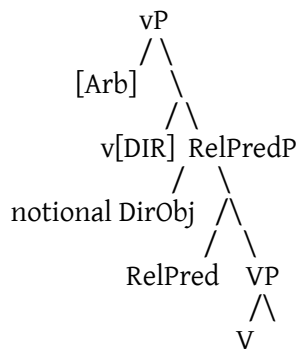
(60) IdpIdc: Impersonal Agent acting on a [+NA] third person Primary Object

- | | | |
|----|---------------------------------|------------------|
| a. | tákamα | ∅-tak-am.α-[w] |
| | 'he was struck' (awehsohsak:12) | Arb-hit-RP.DIR-W |
| b. | nətákamα | nə-takam.α-[w] |

with \emptyset - '[Arb]' acting in complete parallel to $n\partial$ - '[1]'.

This alternative approach accounts directly for the absence of overt Impersonal morphology, in spite of its interpretational presence; more tightly, it explains the descriptive object-like behavior of the 3rd person [+NA] notional object by claiming that there is in fact a structural Agent argument present.

(61) Direct syntax: Impersonal Agent



A potential obstacle for this this view, however, is the corresponding Conjunct form (62), as this does not show obvious evidence of a Direct morpheme: no $-\alpha$ is present.

(62) Conjunct: Impersonal Agent acting on a [+NA] 3rd person Primary Object

etoči-məlikihpənalot

[e]-ətot-məlik-hpən-al.?-ot

C-Xpoint-mocked-harm-RP.?-?Cj

'...they were so ignominiously insulted....' (k. & t. #1:17)

The morphological analysis of this *-ot* element is not wholly certain, however. One obvious analysis would be to see the final *-t* as the same element that indexing the lone [+NA] third person argument in (formal) intransitives (63b) and the Agent (or possibly also the Patient) in [Prox[Obv]] Direct configurations (63b)

(63) NA Conjunct: *-t*

a. ni péčihlät, iyo mək^wásəpəmək, ...

ni	[e]-pet-hl.α-t	iyo	mək ^w ásəpəm-ək
that ^{NI}	C-arrive-move.LV ^{NA} -NACj	this ^{NI}	lake-LOC

'when he arrived at the lake...' (esahsit:5)

b. némihat,...

[e]-nam-h- ^o .α-t
C-see-cause-RP.DIR-NACj

'when he saw [him], ...' (kesihlät (GD version):10)

This of course does not explain the *-o-*. It cannot, for example, be simply that *-o-* is an allomorph of *-α* in the context of *-t*, since *-α-t* is, as we see in (63b) well-attested as the Conjunct form for Proximate (or Obviative) acting on Obviative.

To maintain something of this view, then, we would have to simply stipulate that *-o-* is an allomorph of *-.α*, in the context of an Impersonal Agent. This is not much more than a restatement of the problem.

One alternative would be to view this *-o-* as read as a Patient-oriented light verb (like all the non-Direct TA light verbs), with the *-t* then indicating the presence of a raised (or structurally lone unaccusative) [+NA] argument. In other words, a kind of passive. Given that argument-structural representation is independently attested to reverse between the Idp and Conjunct paradigm, this is a bit more plausible. However, it also requires the unprecedented stipulation that an [Arb[NA]] configuration requires a Direct element in the Idp, but a close kin to the Inverse when in the Conjunct. This is precisely the reverse of the overall distributional pattern of the Direct and Inverse that we examined in §4.3.4.

Still another analysis, however, would identify this *-ot* as only coincidentally (or at best, distantly diachronically) related to this *-t*. There is substantial reason to follow this line. This starts from the existence of a much broader pattern in the TA Conjunct paradigm: a set of Conjunct Person endings having two distinct properties (64).

First, these elements begin in vowels: this sets up a natural morphophonological environment for the deletion of the Direct morpheme, which consists only of the vowel *-.α*.

Second, a number of these elements have idiosyncratic allomorphs precisely in the Direct-triggering pronominal feature configuration (64a,b,d); we show this by indicating adding the [+NA] argument environment in braces.

(64) SAP Agents in the TA Conjunct (Direct)

a. *-ok* Cj, 1s{NA}

b. *-okət* Cj, 1ple{NA}

c. -ak^w Cj, 1pli{(NA)} i.e. also: Cj, 1pli

d. -at Cj, 2s{NA}

e. -ek^w Cj, 2pl{(NA)} i.e. also: Cj, 2pl

Regarding the first property, we can demonstrate that the Direct morpheme is only morphophonologically deleted in such contexts, because it immediately surfaces when the negative concord element -w intervenes between it and the special SAP Conjunct allomorph, removing the hiatus environment we assume motivates deletion of $-\alpha$ (65).

(65) Recovery of the Direct in negative Conjunct

a. $-\alpha$ -w-at 'Conj: 2s acts on NA (neg)'

nəta pečiphawate wəpikit nolke, ...

nəta pet-pVh-^o. α -w-at-e

not arrive-grab-RP.DIR-NEG-2s{NA}Cj-NIabs

[e]-wəp-k.i-t nolke

C-white-have_form.LV^{NA}-NACj deer

'if you do not bring a white deer, ...' (wəpikit nolke)

c. $-\alpha$ -w-ehk^w 'Conj: 2p acts on NA (neg)'

eli-ahtα-pək^wahtəhəwehk^w

[e]-əl- ahtα -pək^wα-əhte-ah-^o.α-w-ehk^w

C-Xmanner- not -can-effective-strike-by_GenInstr-RP.DIR-NEG-2p{NA}Cj{NEG}

'from which you [pl] cannot kill them' (k^wsih^wαpe:9)

A simple account for *-ot* would thus be to classify it as still another of these endings, with the surface absence of the Direct element being simply due to the fact that this ending, like other members of that set, is vowel-initial and so deletes the Direct.

The advantage of this analysis of *-ot* is not just that it slots into an independently established morphophonological pattern. If *-ot* is an allomorph of an Impersonal (Agent) element, then its patterning with SAP Conjunct endings lines up exactly with the apparent Person-like behavior of the Impersonal (Agent) argument in the Idp that we demonstrated earlier in (60).

Of course, the strongest evidence for this kind of analysis would be an equivalent instance where an overt *-α* would surface in an [Arb[NA]] form. This is precisely what is attested in two languages related to Penobscot, Western Abenaki (66a) and Bécancour Abenaki (66b), where an element *-α-mək* (represented <-ômek> in Western Abenaki orthography) consistently appears where Penobscot has *-ot* (66c).

(66) Conjunct: Impersonal Agent acting on a [+NA] third person Primary Object

a. -ômek Western Abenaki (Laurent 1884:191)

<Tagamômuk> [a]-tag-am.ô-mek
 'To strike' C-hit-RP.DIR-ImpsCj

b. -amək Bécancour Abenaki (Speck 1928:183; CQ retranscribed)

weči-nimiphamək [e]-wət-nim-pVh-^o.α-mək
 '[that's why] they [=Imps] grabbed him' C-Xfrom-grabbed-grab-RP.DIR-ImpsCj

c. -ot Penobscot (k. & t. #1:17)

-etoči-məlikihpənalot [e]-ətot-məlik-hpən-al.?-ot
 '...they were so ignominiously insulted....' C-Xpoint-mocked-harm-RP.?-?Cj

The morphology of this form is just as we would expect if the syntax of the Impersonal Agent Direct construction is as in (60) above, i.e. [Arb[NA]]. This is because *-mək* is the basic Conjunct form for the Impersonal argument for all three languages, i.e. including even Penobscot. Hence it appears in the following Penobscot intransitive form (67).

(67) Conjunct: Impersonal *-mək* in intransitives

etali-katonkáhətimək

[e]-ətal-katon-əhk.e-hat.i-mək

[C]-Xspace-forage-make.DO^{NA}-ExtPl.LV^{NA}-ImpsCj

'where one (ExtPl) hunts' (ANTexts:1)

In fact, even in Penobscot, the negative collocation corresponding to the transitive *-ot* involves a version of *-mək*, specifically, the fusion of *-mək* with the negative *-w*. The resulting portmanteau morpheme *-mohk*, surfaces immediately collocated after the *-.α* (68).

(68) Coniunct: Impersonal (negative) *-mohk* in negative Direct

...wečipa-αta-námihαmohk.

[e]-weči=-pa αta -nam-h-^o.α-mohk
 C-Xfrom=-POT not -seen-cause-RP.DIR-ImpsCj{NEG}

'...so that he could not be seen.' (k. & t. #2:18)

In short, even Penobscot has evidence of a basic underlying morphosyntax of the form *-.DIR-ImpsCj*. This in turn suggests most plainly the basic structure given in (60) above. The apparent absence of the Direct element in the context of the *-ot* ending is subsumed under a broader pattern of morphophonological deletion of the Direct for which the Impersonal Agent ending also qualifies both in form and in content.

4.6.4 The Direct as a derivant of the DO light verb

With this surface challenge dealt with, we still have to positively defend and motivate that structure for the Direct light verb. To do this, we introduce a new claim: the Direct head is a derivational relative of the by now quite familiar unergative light verb *-.e* 'DO'. 'DO' being the active-syntax light verb par excellence, such an equation would support the active-syntax

analysis for the Direct element.

At first blush, a Direct in $-.α$ and a DO in $-.e$ do not seem obviously comparable. But $/α/$ and $/e/$ in Penobscot form a well-established morphological pattern of alternation, one that dates back to a Proto-Algonquian alternation between $*a$ and $*e$ (with regular Penobscot reflexes $/α/$ and $/e/$). This pattern has maintained itself productively in many of the modern Algonquian languages (Goddard 1990), as in the Penobscot examples below (69).

(69) Reflexes of PA $*a \sim *e$ alternation

a.	nókihke	nə-wək-əhk.e-əp
	'I bark [howl, chatter, whoop...]'	1-bark-make.DO ^{NA} -P
	nokíhkα	nə-wək-əhk.e-l.α-[w]
	'I bark at NA'	1-bark-make.DO ^{NA} -RP.DIR-W
b.	mósohke	mos ^o -əhk.e-[w]
	'NA hunts moose' (PD:290)	moose-make.DO ^{NA} -W
	ni wəmosóhkən...	ni wə-mos ^o -əhk.e-əne
	'then he went moose hunting...'	that ^{NI} 3-moose-make.DO ^{NA} -N
	(wanəkəməhsəwak#3:1)	

In (69a), the DO element in $-.e$ regularly shifts to allomorph $-.α$ before the RP in $-l$. In (69b), the same light verb shifts to $-.α$ when directly adjacent to the N-ending in $-əne$.

Since the elements involved here are just single vowels, after all, we could however simply chalk this all up to coincidental homophony, or at least write it off as pure diachrony.

There is more to this claim, however. Reflexes of the Proto-Algonquian $*a \sim *e$ alternation are in fact independently attested as synchronic allomorphs of the Direct element. The first instance of such an alternation is not found in Penobscot, but is characteristic of the Eastern Algonquian languages that still retain the objective-absolute contrast (see §2.3.3).

In such languages the objective allomorph is the reflex of Proto-Algonquian $*-a$ and the absolutive, of Proto-Algonquian $*-e$ (cf. Goddard 1974, 1967)---again, matching the proposed Penobscot $-\alpha \sim -e$ alternation exactly (70).

(70) Objective-absolutive allomorphy in Munsee (after Goddard 1974:318; morphemic analysis by CQ)

a. Objective Direct: $-\bar{a}$

wə̀nìhlá-wal máxkwál	wə-nəh-l.ā-w-al	maxkw-al
'he killed the bear(s) [obv.]'	3-kill-RP.DIRobjective-W-obv	bear-obv

b. Absolute Direct: $-\bar{e}$

xwé-li máxkwál níhle-w	xwēli maxkw-al	nəh-l.ē-w
'he killed many bears [obv.]'	many bear-obv	kill-RP.DIRabsolute-W

In Munsee examples in (70), we see an objective Direct in $-\bar{a}$ (70a) and an absolutive Direct in $-\bar{e}$ (70b). Each being the regular reflexes of PA $*a$ and $*e$ respectively, and by the same token, the direct phonological cognates of Penobscot $/\alpha/$ and $/e/$.

As mentioned in §2.3.3, Penobscot itself has eliminated the objective-absolutive contrast, having generalized the objective pattern, and therefore has also removed any morphological environments for a reflex of $*e$ to appear.

All but one, rather. Penobscot does itself have an instance of a Direct in *-e*, as the allomorph of the Direct when used in the 2s Imperative.

(71) Penobscot 2s Imperative Direct in *-e*

a. *k^wik^wsohtawe.* *k^wik^ws.i-w-h.t-aw.e*
 'Whistle for him (or her).' (SDMC) whistle.LV^{NA}-W-?.T-RP.DIR{2sImpr}

b. *pələnsis mile ččikənal.*

<i>pələn-əhs-s</i>	<i>m-l.e</i>	<i>ahčikəne-al</i>
Frank-AFF-DIM	give-RP.DIR{2sImpr}	apple-obv

'Give Frank an apple.' (SDMC)

The 2s Imperative shares with the absolutive a decidedly bare form; both, for example, block or simply lack Peripheral Endings. If the **e~*a* alternation of the absolute-objective contrast is somehow related to this bareness, it is no surprise that this is the one place in Penobscot where an absolute-like, unchanged variant of the Direct can surface.

So far, then, all we have established is that the Direct does have allomorphs that are identical in form to the DO element, and that the */e~/α/* morphophonological alternation needed to relate the two is independently established. We still need to show evidence that these forms alternate more directly, as unergative-intransitive and agentive-transitive variants respectively.

Consider, then, the forms in (72), where a Penobscot *-e* and *-α* alternate between related intransitive (72a) and transitive (72b) predications.

(72) Penobscot: *-e* vs. *-α*

- | | | |
|----|--|--------------------------------------|
| a. | məkəne | mək-ən.e-[w] |
| | 'NA chooses, does choosing,
picking out' (PD:273) | chosen-by_hand.DO ^{NA} -W |
| | nəməkəne | nə-mək-ən.e-əp |
| | 'I...' | 1-chosen-by_hand.DO ^{NA} -P |
| b. | nəməkənα | nə-mək-ən.α-[w] |
| | 'I select, choose NA' (PD:273) | 1-chosen-by_hand.DIR-W |

While these pairs are not great in number, they are more than isolated coincidences: a set including the above, plus four more cases was cited in §2.4.5:(79). Such pairs raise an obvious question: are they intransitive alternants holdovers of absolute forms, comparable to Munsee ones in (73),

(73) Munsee absolutes (after Goddard 1974:318; morphemic analysis by CQ)

xwéli máxkwəl níhle-w	xwēli maxkw-al	nəh-l.ē-w
'he killed many bears [obv.]'	many bear-obv	kill-RP.DIRabsolute-W

or are they forms using the 'DO' light verb, as in (74)?

(74) Penobscot intransitives in *-e* 'DO'

- | | | |
|----|---|---|
| a. | mánesse

'NA gathers clams/shellfish' | man-ess.e-[w]

removed-clam.DO ^{NA} -W |
| b. | mánatak ^w e

'NA gathers, collects evergreen boughs' | man-atak ^w .e-[w]

removed-evergreen_bough.DO ^{NA} -W |
| c. | mánsewe

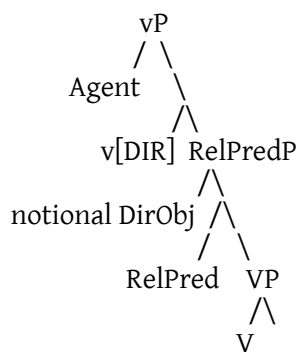
'NA takes off clothes, undresses' | man-ahsew.e-[w]

removed-clothing.DO ^{NA} -W |

The answer we offer is the simplest one: they are both, since those two elements are one and the same. Now up to this point, the argumentation has had a strongly etymological cast. We now turn to a more clearly synchronic line of reasoning for relating the Direct to the DO.

Recall the syntax of the Direct element suggested in (22) and repeated here as (75).

(75) Direct syntax (Idp/Cj)



Now consider this. The pronominal feature configurations that are permitted to co-occur with the Direct construction are all Agent-prominent ones: hence Direct forms can only be used with Agents that are (relative) Proximates to their to (relative) Obviative Patients, and never the

reverse; and with other configurations of relative Core Agents over relative Periphery Patients, i.e. SAPs acting on non-SAP NAs. Such a distribution is most clearly accounted for within the one-argument-per-light-verb constraints of affixal verb model if the Direct light verb is what introduces these Agents, and no other argument.

Such a view is not only captured by the structure above, but also explains why Direct TAs and all TIs have the Agent indexed in the Idp clause-type by Possessor marking. Under this view, in both the Agent is introduced---and crucially, stays---as the topmost argument in the structure. This, again, is in contrast to the Inverse, LV¹, and LV² elements (2 » 1 effects regarding the LV² notwithstanding), which evidently introduce or at least raise an internal argument.

We might note in passing that a system of a single, "subject-oriented" voice morphology uniquely opposed against a richer array of "object-oriented" voice morphology is not an unusual system to argue for. Descriptively at least, this is the familiar pattern of Austronesian-style voice systems, which typically have one single active voice-type morphology set up against a more diverse collection of distinctive non-active ones. This makes much sense, since in both cases this asymmetry can be read right off of the purely topological constraints on syntactic structure: within a given structure there can be only one topmost element, but an (in principle) unlimited number of internal ones (for a structural homolog, compare the directly related "only one Proximate" constraint discussed in Ch. 3).

So the Direct construction has close structural and interpretational affinities to the TI, which in §2.4 we argued to be syntactically comparable to antipassives. However, just as the Inverse is not quite a passive (Bruening 2005:2), the Direct is not quite an antipassive: it maintains the obligatory interpretation of two arguments, and so does not have the optional drop of an oblique Patient argument that characterizes a true antipassive. But just as the Inverse does show some tantalizingly passive-like properties, so too does the Direct still rather resemble an antipassive. First and foremost is its relationship to the Proximate-Obviative contrast. Were we to recast the Obviative as a special, domain-specific oblique (as we

speculated in §2.4.4), we would have an exceedingly tidy story of the distribution of this contrast relative to the Direct and Inverse constructions. Namely, that the Obviative-oblique marks the oblique Agent of an Inverse-"passive", and the oblique Patient of the Direct-"antipassive".

An account somewhat along these lines has in fact been proposed by Déchaine and Reinholtz 1998, who argue from Cree data that the Direct-Inverse system is a split-ergative one, wherein the Peripheral endings agree with the marked Case of each: accusative for the Direct, ergative for the Inverse. The present account takes this a step further, and suggests collapsing those two into a single overarching marked case, the Obviative-oblique. Furthermore, it addresses specifically a point not mentioned in Déchaine and Reinholtz 1998, namely, that the Peripheral endings conspire always to agree for a 3rd person, and the hierarchically lowest one at that.

Some substantial problems remain to be worked out with such a view. First, of course, is the issue of juggling a multitude of different obliques, since we have proposed a distinct type of oblique for the notional object of the TI construction and the Secondary Object; and Rhodes 1990b notes still another (not discussed in this work, since it has no morphosyntactic effect on the verbal complex). This is actually more of a good problem than a bad one, since keeping the syntax of the Direct as comparable to that of the TI as possible does again capture the parallel scope constraints that Bruening 2005 reports over the TA Direct, TI, and (not surprisingly) also the AI+O constructions.

Second is the nature of the Obviative-oblique. First of all, phenomena like Obviative agreement would have to be likened to dative agreement in languages like Basque, i.e. agreement for an inherently structurally dependent, "sub-configured" argument. This would of course have to extend even to nominal Possesseees of 3rd person Possessors, which, in being Obviative-marked would essentially be marked for their own case-role in the transitive predication of Possessor-Possessee that they holds. This is not implausible, given the notion that nominals have their own R-argument (Williams 1994), and would lay the foundation for a

more cross-linguistically grounded account of exactly what Obviative morphology is.

Thirdly and most complex, though possibly ultimately least difficult to manage: the Obviative-oblique cannot be a simple oblique, since it would then be triggered by all Agents of a Direct construction, and not just 3rd person ones. I have no immediate explanation for this, but the problem is at least a familiar one of ergative split: overt marking being necessary only for one of two featurally co-cyclic non-SAPs in a single [3[3]] configurations is also found in languages such as Punjabi (Butt 2004:3, Bhatt 2003:5), where aspect-sensitive ergative marking is not contrasted on SAP Agents, only non-SAP ones. The obligatory use of the Obviative-oblique in [3[3]] configurations (intuitively well-motivated functionally, for reasons of disambiguation and canonical Agenthood) as against its absence in cross-cyclic (mixed) configurations would seem to fall into this type of phenomenon.

4.6.5 The "lexical" Inverse: almost but not quite a passive

As we have just mentioned, although Bruening 2005's overall argument is that the Inverse involves essentially passive-like A-movement, he notes early on that it should not be considered a full passive, because the external argument is not lost, no change in valence occurs, and the verb remains transitive, taking two arguments obligatorily (Bruening 2005:2).

It is indeed evidently the case that the basic Inverse always retains a clear interpretation of an Agent, albeit always one that is 'lesser' than the Patient in some feature-like sense, and whose structural position with regard to the main spine of the complex predication is not as clear. In this section, we examine two structures whose formal resemblance to the Inverse is quite explicit---both derive via an element in *-.ak^w*---and whose interpretational outcomes show a similar pattern of a weak to nearly nonexistent Agent. Both of these constructions are built onto the RP.LV pattern common to all TA constructions (see §2.2.1), with their inner light verb being the Inverse element, and their outer light verb distinguishing the two: a "spatial state" light verb for what we term the *Inverse Spatial*, and a

reflexive light verb for the *Inverse Reflexive*.

These two affixal verbs' significance to this chapter's argumentation lies in their interpretation: the Inverse Spatial construction derives a set of lexical stems having an unexpressed "diffuse" Agent, and the Inverse Reflexive gives a comparable set which have an unexpressed (and also rather diffuse) perceiver-Agent. Assuming that light verbs first and foremost indicate the status of elements that are fully present in the structure, this makes contribution of the Inverse element in each type of affixal verb most plausibly that of indicating the thematic Patient, the undergoer---a semantics canonically associated with A-movement of the internal argument. We then find a further hint of just this sort of syntax in that the Inverse Reflexives distinguish in choice of reflexive light verb the gender of their only argument.

While this is of course a necessary outcome if these stems are to be well-formed at all within the constraints of the affixal verb model, the particular assumption that the $-.ək^w$ element in both affixal verbs is an internal-argument-raising element makes for a straightforward chain of heads introducing and transferring a representation of these collocations' lone argument. In so doing it strengthens the claim that the same is the case for the $-.ək^w$ found in the basic transitive Inverse construction.

4.6.5.1 Inverse Spatial

We begin with the Inverse Spatial, illustrated in (76). It is defined as a collocation in which the Inverse light verb $-.ək^w$ (taking an RP, i.e. $-RP.INV$) is stacked under a (generally) NI Final $-e$, which forms intransitive verbs describing spatial states (Denny 1984, 1983, 1981, 1978; see further examples in §2.2.1:(3b)). This $-e$ we represent in the morphological breakdowns as a simple LV^{NI} element. The resulting Inverse Spatial collocation has the form $-RP.ək^w.e$. For comparison, here we also provide related full TA-stem forms that take the Direct light verb.

(76) Inverse Spatial: *-RP.əkw.e*

a. *ak^wanələyákhoke, áwikəwəm.*

ak^wan-əliyak-ah-^o.əkw.e-[w] a-wikəwəm

cover-snow-by_GenInstr-RP.INV.LV^{NI}-W 3-house

'His house [= NI] is covered with snow.' (S:60:62)

nəkətələyakhə

nə-kə-l.t-əliyak-ah-^o.ə-[w]

'I hide NA in the snow'

1-hide-RP.T-snow-by_GenInstr-RP.DIR-W

b. *napi-pəsəkəpámək^we*

nəp-pəsək-əp-am.əkw.e-[w]

quick-dark-look-RP.INV.LV^{NI}-W

'NI gets dark quickly; the darkness descends quickly'

nətələpamə

nə-əl-əp-am.ə-[w]

'I look at NA'

1-thus-look-RP.DIR-W

Since gender-specification of the topmost light verb supports the claim that the Inverse element below it is a raising predicate, we should note here that this particular light verb

evidently happens not to be gender-specified at all, since many stems so formed are usable with NA arguments as well (77).

(77) "Inverse Spatial" with NA-class arguments

a. nətahtawəpáhoke

nə-ahtaw-əp.e-ah-^o.ək^w.e-əp

1-contain-water.LV^{NI}-by_GenInstr-RP.INV.LV^{NA}-P

'I took in some water (in boat)'

b. nəpəssanəpáhoke

nə-pəhsan-əp.e-ah-^o.ək^w.e-əp

'I swamped my canoe'

1-full-water.LV^{NI}-by_GenInstr-RP.INV.LV^{NA}-P

c. awepələmsoke

awep-ələmahs-^o.ək^w.e-[w]

'NA is blown aloft'

upwards-wind_blow-RP.INV.LV^{NA}-W

Siebert's and others' field notes are not explicit on this point; but dictionary entries such as those in (78) and quite a few textual attestations suggest that at least in principle Inverse Spatial stems can simply be used with either gender:

(78) "Inverse Spatial" with NA- or NI-class arguments

kaskihálək^we

kask-h-al.ək^w.e-[w]

'NA/NI floats down an incline (as

vertical_drop-shift-RP.INV.LV-W

over a rapids or falls)'

ɾənihálək^we

ɾən-h-al.ək^w.e-[w]

'NA/NI floats into the open, into view'

clear-shift-RP.INV.LV-W

In fact, what constraints on gendered use that exist appear to be mainly semantic. Hence Inverse Spatial stems in *-əpámək^we* '(NI/there) is visibility' are only ever attested with a NI "weather" argument, in stems describing the degree of overall visibility, particularly (and possibly exclusively) in the context of sunrise or sunset (79).

(79) "Weather" Inverse Spatial *-əpámək^we* '(NI/there) is visibility'

napi-pəsəkəpámək^we

nap-pəsək-əp-am.ək^w.e-[w]

quick-dark-look-RP.INV.LV^{NI}-W

'NI gets dark quickly; the darkness descends quickly'

nóləpamə

nə-wəl-əp-am.ə-[w]

'I see NA plainly' (PD:463)

1-good-look-RP.DIR-W

Except in clear cases of personifications, the arguments of weather-verbs in Penobscot are exclusively formally NI, as one might expect. Correspondingly, the Inverse Spatial *-eləmək^we* 'NA have ... luck' is, naturally, only ever attested with NA experiencer arguments.

(80) Inverse Spatial *-eləmək^we* 'NA have ... luck'

nóléləmək ^w e	nə-wəl-el-əm.ək ^w .e-əp
'I have good luck'	1-good-emote-RP.INV.LV ^{NA} -P

nóléləmα	nə-wəl-el-əm.α-[w]
'I am pleased, delighted with NA'	1-good-emote-RP.DIR-W

Whether all these stems have dually-/under-specified argument-class animacy will probably never be known; but this seems the most likely possibility.

Returning to the question of interpretation, we note that the these collocations' semantics read off more or less directly from the light verbs as they stack above their RPs and lexical head complex(es). That is, the RP and its immediate complement head together specify the means by which the arguments is acted upon, and the Inverse element collocated with the spatial light verb together provide the specific flavor of Patient-prominence associated with such constructions (81).

(81) Inverse Spatial: "diffuse Agent" forms

-əlαm(ah)s- ^o .ək ^w .e	'subject to external action by wind'
-ah- ^o .ək ^w .e	'subject to external action by general or unspecified instrument'
-əp.e-ah- ^o .ək ^w .e:	'subject to externally induced water condition: draw water, take in water' (cf. -əp.e

	'water state')
- <i>ɔ</i> liyak-ah- ^o .ək ^w .e	'subject to externally induced snow condition: be covered in snow' (- <i>ɔ</i> liyak(.e) 'snow (state)')
-h-al.ək ^w .e	'subject to external action with shifting effect on state or position effect (idiomatically narrowed to 'float, drift in current)')
-el-əm.ək ^w .e	'subject to external emotive action (idiomatically narrowed to 'have luck)')
- <i>ɔ</i> p-ám.ək ^w .e	'subject to vision ('be visible to a certain degree)')

One might better characterize the Inverse Spatial as lexically-derived "diffuse Agent" forms, since these stems all share the property that their single argument is subject to the action of rather diffuse natural Agents: the blowing of wind, the creeping in of water, the current of a river, the unknown agent(s) that determine our luck, and similarly, the diffuse "lookers" who experience visibility.

Again, identifying the -.ək^w here as a Patient-prominent head captures the undergoer reading quite readily. We might at the same time account for the extension (or rather, the inclusion) of NA referents into the range of the usually NI-only light verb in -.e in the following way: in the grip of the large-scale natural forces denoted by these stems, NA referents have little agency or control by which to distinguish them semantically from NI ones.

There is a second concern regarding gender of the sole argument of the stems: recall that these same stems were cited in §2.2.3 as counterevidence to the traditional stem-agreement analysis of the TA-TI contrast. But they also read as challenges to this work's claim that TA-markers are actually [+NA]-triggered elements satisfying DAS requirements, since under the proposed model, [-NA] arguments have no motivation to be introduced with high argument-introducing predicates, i.e. RPs/TA-markers.

Facing this, however, is independent evidence that in complex light verb constructions, it is only the topmost affixal verb collocations that have a gender-selective effect. Hence in §2.3.7.2.1 we noted that many ditransitives (TA+Os) consist of elements identical in form to TI affixal verb constructions that are embedded under an Applicative *-RPLV* affixal verb to derive the full ditransitive. These TI-like structures are, if anything, associated with the ditransitive Secondary Objects---which, recall, can be [+NA]---even though TIs, while similar to AI+Os in many respects, are evidently not just Secondary Object-taking constructions, and as a rule cannot take [+NA] arguments (§2.4.3).

Here we offer a preliminary suggestion only. Within the basic model of high structure as more functional, and low structure as more lexical, it makes sense that gender-feature selectional sensitivity be similarly structurally constrained, such that the same collocation of elements can be neutral with respect to argument gender features when deeply embedded in the complex predication (where it is more lexical, more bare Root-like) and yet then exhibit strict selectional properties when manifested as the topmost elements of the structure (where it is the most functional, the most actively syntactic). Now normally, since they have no DAS-based motivation for such a structure, [-NA] arguments cannot be introduced via RP predicates: regular TA constructions cannot take [-NA] notional direct objects. But this is only an economy-based constraint, not a global ban on [-NA] arguments ever associating with RPs. What is needed, then, is an independent factor requiring the RP. That factor is the Inverse element itself.

Recall that in §2.2.1 we independently set up collocations like *-RP.INV* as part of the

broader class of affixal verbs. We noted that affixal verbs of all kinds have a special status in the system, in that their constituent elements are syntactically analyzable, but not always productively mutually independent: they are often (though not exclusively) structural idioms, with one (or both) elements either not or only limitedly productive without the other. It requires no new stipulation, then, that structures that necessarily require the semantic and syntactic contribution of the Inverse element might also exhibit restrictions in the range of possible immediate complements that the Inverse light verb takes to form an affixal verb: in other words, the set of RPs. Again, this aspect of affixal verbs is still an unexplained stipulation, but it is a stipulation independently required to properly characterize the productivity of unrelated affixal verbs as well.

Regarding the gender-neutrality of the topmost light verb itself, recall too that still another collapse of the usual NA~NI light verb contrast comes in another instance where the lone argument is heavily Patientive: this is the *-as.i* construction also discussed in §2.2.1. It may, however, simply be the case that NI-class light verbs are unmarked for gender, and their general ill-formedness with NA-class arguments is due only to fact that, except in precisely the case of the kinds of stems presently in question, there usually exists a competing form with a positively NA-marked light verb.

4.6.5.2 Inverse Reflexive

Inverse Reflexives (82) exemplify this more common pattern: while sharing the *-RP.INV* pattern with the Inverse Spatial, above that collocation they strictly distinguish NA and NI light verbs, specifically *-as.i* 'NA reflexive' and *-at* 'NI reflexive'.

(82) Inverse Reflexives: *-RP.əkʷ.as.i*, *-RP.əkʷ.at*

a. *-apeməkʷəsi* 'NA be of ... benefit'

wəlapémək^wəso

'NA is useful' (S:28)

-apémək^wat 'NI be of ... benefit'

wəl-ape-m.ək^w.əs.i-[w]

good-benefit-RP.INV.rflx.LV^{NA}-W

wəlapémək^wat

'NI is useful' (S:28)

wəl-ape-m.ək^w.at-[w]

good-benefit-RP.INV.rflxLV^{NI}-W

nolápemα

'I derive, receive good benefit
from NA' (PD:463)

nə-wəl-ape-m.α-[w]

1-good-benefit-RP.DIR-W

b. -təhəmək^wəsi 'NA feel, seem...'

wəlitəhámək^wəso

'NA is approved; NA is esteemed,
NA is held in high regard' (S:28)

-təhəmək^wat 'NI feel, seem...'

wəl-təhα-m.ək^w.əs.i-[w]

good-feel-RP.INV.rflx.LV^{NA}-W

sipkítəhəmək^wat

'NI is not [sic] a very long time, does
not [sic] seem very long (time)' (PD:482)

nolítəhαmα

sipk-təhα-m.ək^w.at-[w]

long_time-feel-RP.INV.rflx.LV^{NI}-W

nə-wəl-təhα-m.α-[w]

'I agree with NA, think well of NA' (PD:464) 1-good-feel-RP.DIR-W

c. -eləmək^wəsi 'NA feel, seem [= be perceived as]...'

wəli-wewéləmək^wəso

wəl-wew-el-əm.ək^w.əs.i-[w]

'NA is well-known' (PD:471)

good-known-emote-RP.INV.rflx.LV^{NA}-W

-eləmək^wat 'NI feel, seem [= be perceived as]'

sipkéləmək^wat

sipk-el-əm.ək^w.at-[w]

'NI seems like a long time' (PD:482)

long_time-emote-RP.INV.rflxLV^{NI}-W

nóleləmα

nə-wəl-el-əm.α-[w]

'I am pleased, delighted with NA' (PD:464)

1-good-emote-RP.DIR-W

d. -amamək^wəsi 'NA feel (physically) [NA be perceived physically as]'

ahk^wamámək^wəso

αhk^w-am-am.ək^w.əs.i-[w]

'NA suffers acute pain; NA has severe
soreness; NA is unpleasant to contact,
coarse, crude' (PD:18)

harsh-feel_bodily-RP.INV.rflx.LV^{NA}-W

-amamək^wat 'NI feel (physically) [= be perceived physically as]'

ahk^wámamək^wat

αhk^w-am-am.ək^w.at-[w]

'there is acute pain; there is a severe

harsh-feel_bodily-RP.INV.rflxLV^{NI}-W

soreness; NI is unpleasant to contact,
coarse, crude' (PD:17)

nəčilámamα	nə-čil-am-am.α-[w]
'I have a premonition of NA; I sense NA's presence [a ghost or a spirit]' (PD:187)	1-marked-feel_bodily-RP.DIR-W

cf. also corresponding TI construction

nətahk ^w ámatamən nətəp	nə-αhk ^w -am-am.t.am-əne	nə-təp
'I've got a headache' (S.D.:532)	1-harsh-feel_bodily-RP.T.LV ^{NA} -N	1-head

Here again, the semantic contribution of the Inverse as 'undergoing' remains consistent; but here now we can see its function in raising the internal argument into the domain of the topmost light verb, as reflected by the gender-matching effect. The use of a morphological reflexive here as a (medio)-passive is not a surprise (this is familiar from Romance and Slavic), but the exact motivation for why this occurs only with a set of predicates of perception remains elusive.

The Inverse Reflexive and Inverse Spatial affixal verbs add one further point to the treatment of the Inverse as a semi-lexical argument-raising head: that the the derivation of Inverse Spatial and Inverse Reflexive constructions is evidently not freely productive. This makes a treatment of the Inverse as an agreement element (a stance no longer widely held by Algonquianists) difficult, but is readily accounted for if the Inverse is a full light verbal predicate in its own right.

What we have demonstrated with these forms, then, is that interpretational and syntactic effects of the element identified here as the Inverse are identical to those found in the

basic transitive Inverse construction. These "lexical" Inverse constructions thus provide an independent set of forms that support an analysis of the Inverse element as a Patient-prominent light verb, an element that provides that prominence interpretation via its licensing of A-movement.

4.6.6 Summary

In this section we have sought to reinforce the broader applicability of the structural claims that Bruening 2005 makes for the Passamaquoddy Direct and Inverse on the basis of scope readings, by showing that a close analysis of the morphosyntax of these two elements in Penobscot turns up further patterns that explain clearly if Bruening's syntactic characterizations are assumed.

The argumentation we have offered here is in some cases tantamount to internal reconstruction, and we have not shied away from comparative evidence as well. We have done so because this diachronic material simply demonstrates that the Direct and Inverse characterization argued for synchronically is, as we might expect given its stability across the Algonquian family, an old one.

We have seen, for example, that attributing to the Direct a plain light verb structure basically identical to that assumed for other Agent-prominent stems (especially TIs) gives a unified account of the Idp and Conjunct realizations of the [Arb[NA]] configuration, and provides a coherent explanation for the vocalic alternation of the Eastern Algonquian objective-absolutive contrast (and the Penobscot TA 2nd person singular Imperative), and matches the overall Agent-prominence of the set of pronominal-feature configurations it may host. By the same token, the characterization of the Inverse as an unaccusative/raising predicate, rather than as some sort of special kind of agreement, accounts for its use in lexically derived stems--both in that it can be so used at all, and in that in such forms it makes the same basic interpretational and structural contribution that it does in transitive configurations.

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