

Medials in the Northeast

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Introduction

The purpose of this paper is to introduce a model, here termed *maximal triparticity*, as a means to better understand Algonquian stem structure. Since at least as early as Bloomfield 1927 (et seq.), Algonquian stems have been analyzed in terms of a maximally tripartite templatic structure:

- (1) Maximally tripartite stem structure

stem = [Initial-Medial-Final]¹

Goddard 1990 has clarified a further distinction between primary and secondary stem derivation, with [Initial-Medial-Final] being the maximal structure for primary derivation, and [Initial-Final] for secondary stem derivation.

A striking feature of Algonquian stem morphosyntax is that this same maximally tripartite pattern recurs within the *internal* structure of Initials, Medials, and Finals themselves. For Medials and Finals in particular, standard analyses recognize the following tripartite structures, and no more:

- (2) Maximally tripartite stem-subcomponent structure

Medial = Premedial-Medial-Postmedial
Final = Prefinal-Final-Postfinal

Thus at two separate levels of structure we see a maximum of three elemental components: once at the level of stem structure, then again at the level of the internal structure of individual stem-subcomponents.

These observations motivate the proposed model, which starts from a concept introduced by Boeckx 2008: that syntactic projection is always *maximally tripartite*. Within a maximal triparticity system, a well-formed iteration of syntactic projection has at most three parts; and correspondingly, the presence of further elements always implies the engagement of additional iterations of structural derivation/representation.

The core of the present study, then, is the application of this notion of maximal triparticity to both the stem and its subcomponent (Initial, Medial, Final) levels of structure. First, in the maximal triparticity of the stem-level [Initial-Medial-Final] pattern, which we assume (especially after Goddard 1990) to be uncontroversial. Then once more in the *internal* structure of Medials and Finals. In this case we offer as specific syntactic characterization for each of the (maximum of three) morphological elements deriving a stem-subcomponent. We suggest that these are: a lexical Root, a (semi-) functional light noun/light verb (Marantz 1997, inter alia), and one additional, adjunct-like tertiary element. We take the two non-Root components here to correspond, respectively, to the established categories of *Post{medial/final}* and *Pre{medial/final}*.

- (3) Maximally tripartite stem-subcomponent structure, syntactically characterized

Medial = Premedial-Medial-Postmedial = adjunct-Root-light noun
Final = Prefinal-Final-Postfinal = adjunct-Root-light {noun, verb}

This close look at Medials allows a novel observation to be made. Namely, that a twofold parallel holds between Northern Iroquoian noun incorporation and its nearest Algonquian correlate, the use of Medials in verbal stems (Denny 1989). In both language groups, a peculiar "extra" morpheme

often appears attached to a notional verbally-incorporated noun. In Algonquian languages, this is a functional element in PA *-ak or in PA *-e-, and is distinctive to many Medials---earning it the name *Postmedial* or even *post-medial extension* (Goddard 1990:467). In nearby Northern Iroquoian languages, a comparable "extender" (Abbott 2006) or "nominalizer" (Baker 1997) element---of the form *-hser/tsher-* in Mohawk, for example---is often required immediately after a notional incorporated nominal. What clinches the parallel is that both languages also exhibit in nominal stems a peculiar double layering: first this element, then an additional nominalizer---a dual marking of nominalization, seen as PA *-ak-w and Mohawk *-hser/tsher(a)-'*. That purely areally related languages would share this apparent morphological quirk suggests a deeper morphosyntactic process at work.

The immediate question then becomes: what is this *-ak/*-e-, this *-hser/tsher-* element? The claim we offer here is that it is an intermediate-level light noun. Assuming that the Iroquoianist characterization of this element as a nominalizer (again, one that somehow requires an additional nominalizer to create freestanding nominal stems) holds true, this suggests that these incorporatees are nominalized, but only in some sort of syntactically minimal, stripped-down fashion. This is in line with the extensive literature arguing that notional incorporated nominals have a reduced functional structure (Öztürk 2005, Wiltschko 2009, inter alia). The neoconstructionist approach (see especially Marantz 1997, Ramchand 2008) offers a concrete model for these phenomena, formulating syntactic nominal and verbal stems strictly as collocations of categorically unspecified (=pre-categorical) lexical Roots together with *light elements* that introduce categorical status---hence the names *light noun* and *light verb*--and, in most approaches, also event and argument structure.

The maximal triparticity model by definition permits three levels of contrastive structure: minimal, intermediate, and maximal. Drawing inspiration from analyses that take noun incorporation not to be just one uniform syntactic pattern (cf. especially Mithun 1984, Dunham and Barrie 2008), we suggest here that Root-incorporation (discussed at length for Halkomelem in Wiltschko 2009) represents minimal-level incorporation. Correspondingly, Roots carrying Postmedials represent intermediate-level incorporation, while incorporation of collocations containing Finals (i.e. stem-incorporation) represents maximal-level lexical incorporation. In contrast to Finals, whose maximal-level light element derives a syntactic noun or verb, Roots and Medials share a common property: both are pre-categorical. And indeed, it is difficult to demonstrate conclusively that Medials are anything but complex Root collocations. Which is expected, given this shared feature of structural non-maximality. There is, however, evidence of a distinctive intermediate-level structure to Medials. Namely, that Medials, while pre-categorical, nonetheless have a substantial nominal character to them, in functioning as classifiers (a cross-linguistically strongly nominal category) and also as quasi-arguments, chiefly notional theme, locus, and instrument (argumenthood being prototypically a property of nominals; cf. Wiltschko 2009:213-214, after Mithun 1984:861).

A useful outcome here is that the tantalizing similarities between Medials and Finals comes down to degree of category-building functional structure, rather than some inherent morphological-categorical distinction. This analysis thus sets up Algonquian and Northern Iroquoian languages as offering a useful window into stem-internal syntax---precisely because, unlike many presently more heavily-researched languages, they wear their Root-to-stem-deriving syntax quite clearly on their morphological sleeves.

Maximal triparticity and the fractal nature of syntax (= Boeckx 2008:ch. 4)

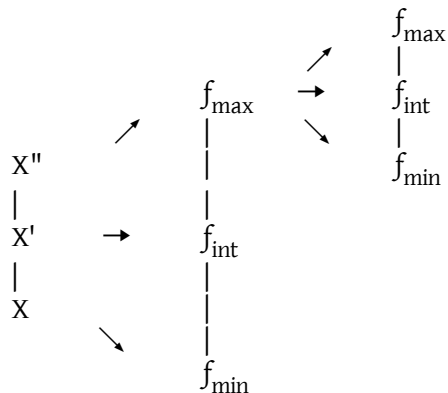
Based on an extensive review of syntactic phenomena, ranging from pronominal feature contrasts to locality and chain formation, Boeckx 2008:159 identifies an overarching constraint on syntactic projection: well-formed projections of an element X project at most three, nested elements. I propose the name *maximal triparticity* as a cover term for this observation.

Maximal triparticity is likely an outcome of the inherent properties of minimal computational system, being an emergent effect of binary merge (Boeckx 2008:124)---put simply, combining two elements together, as any model of syntax must necessarily do, creates three elements: the original two, plus the new combined element. The novel observation of Boeckx 2008 is that this also seems to be the

maximum complexity allowed to a single, local syntactic projection: hence the [X'' [X' [X]]] triparticity of X-bar phrasal structure, to name just one example---for more, see in particular Boeckx 2008:ch. 4.

Boeckx 2008:129 notes a further important property of this tripartite hierarchical organization: that it is *fractal*, pervading narrow syntax and reappearing at all levels/scales of projection. This nested iteration of minimal, intermediate, and maximal projection can be diagrammed as follows:

- (4) Maximal triparticity of a well-formed projection representation (Boeckx 2008:159)



For the remainder of this paper, we will show how this type of fractality manifests in Algonquian stem structure. Specifically, once in that stem-level structure has a maximally tripartite character [*Initial-Medial-Final*], and then once more in that stem-subcomponents are then themselves internally maximally tripartite. The latter is again the analysis wherein Medials have a maximal internal structure of [*Premedial-Medial-Postmedial*], and Finals a corresponding maximal structure [*Prefinal-Final-Postfinal*].

As we will see in the next section, because Initials are the open class and primary locus of iteration, and because their syntactic relation to the Medial-Final complex is surface-ambiguous (Goddard 1990, Brittain 2003)---this we take to be a simple outcome of Medials and Finals being morphophonologically dependent elements---the defense of maximal triparticity in the internal structure of Initials is too involved to lay out here. As a promissory note, then, we simply assert that we have yet to see any counterevidence to maximal triparticity in Initials, and assume the present analysis can be maintained in that domain as well.

As we proceed, it will be useful to recall the core prediction of maximal triparticity: that anything with more than three pieces must have some degree of syntactic-structural iteration within it.

The standard model of Algonquian stem structure

Algonquianist literature on stem structure distinguishes between *primary* and *secondary stem derivation* (Bloomfield 1927 et seq., subsequently refined by Goddard 1990; also examined extensively in O'Meara 1990). According to Goddard 1990:451, primary derivation stems can consist simply of an Initial (5a), or of an Initial plus a Final (5b), or maximally of an Initial plus a Medial plus a Final (5c).

- (5) Primary stem derivation structures (Penobscot; following Goddard 1990:451)

a. Initial

Stem:	<i>nəpi(y)-</i>	'water'
Initial:	<i>nəpi-</i>	'water'
cf. stem:	<i>nəpi-w.i-</i>	'NI is watery, wet (in the sense of covered or washed by

water)'

b. Initial-Final

Stem:	<i>apakəss.in-</i>	'NA lie facedown, flat, right-side down; NA lie flat on h/her belly'
Initial:	<i>apak-</i>	'flat'
Final:	<i>-hs.in</i>	'NA lie, be laying'

c. Initial-Medial-Final

Stem:	<i>apakihpsk^wanehs.in-</i>	'NA lie flat on h/her back'
Initial:	<i>apak-</i>	'flat'
Medial:	<i>-(ə)hpəsk^wan.e-</i>	'back'
Final:	<i>-hs.in</i>	'NA lie, be laying'

Primary stem derivation gives at most a ternary structure, [Initial-Medial-Final]. More complex stems are either formed by secondary derivation (see below)---or by iteration of primary stem derivation, through the creation of derived Initials, Medials, and Finals that are slotted back into the [Initial-Medial-Final] template (Goddard 1990:450). Strong constraints apply to this ternary template: Goddard 1990:452 observes that "there are ... no stems with two medials in surface constituent structure." From this overall picture, we conclude that maximal triparticity holds at the primary stem level.²

Secondary stem derivation, as established in Goddard 1990, is distinguished by a reduced set of forms and functions. First is that Secondary stems only "have the form Stem + Final or Theme + Final" (Goddard 1990:471). Second is that while primary and secondary stem derivation both can take primary stems as input (= Initial), secondary stem derivation can only add further Finals, and never Medials. Third is that secondary stem-forming Finals are largely semantically abstract, mostly category-changing (Goddard.1990:471). Secondary derivational Finals thus look more functional-structural in nature, i.e. occupying the topmost layer of event-and-argument-structure-building morphosyntax.

In (6) we see a derivation from primary stem *wəlitəhəso* 'NA be happy' (composed of Initial *wəl-* 'good', Medial *-təh.α* 'heart', and Final *-əs.i* 'NA reflexive') in (6a), to a secondary stem formed with causative Final *-hk(V)h.°* (with transitive Theme *-α*) in (6b), along with a parallel secondary stem formed with nominalizing Final *-αk.an* (6c).

(6) Secondary stem derivation

a. Primary derivation

<i>wəlitəhəso</i>	[wəl -təh.α-	-əs.i]	-[w]
'he is happy' (PD:472)	[good- -heart.LN-	-rflx.LV ^{NA}]	-W
	[Initial- -Medial-	-Final]	-Idp_3

b. Secondary derivation: intransitive to causative

<i>nolitəhəsikhə</i>	nə [wəl-təh.α-əs.i]-	-hkVh.°.α	-[w]
'I make him happy' (PD:464)	1-[good-heart.LN-rflx.LV ^{NA}]-	-caus.LV ^d .DIR	-W
	[Initial]-	-Final/Theme	-Idp_3

c. Secondary derivation: intransitive (verbal) to nominal

wəlitəhásəwakan	[wəl-təh.α-əs.i-]-W-	-αk.an
'happiness' (A.D.:Lonesome Song)	[good-heart.LN-rflx.LV ^{NA}]-W-	-NOM.LN
	[Initial]-W-	-Final

From the perspective of a maximal triparticity account, the significant question is this: why is primary stem derivation maximally ternary at each level of derivation, while secondary stem derivation is maximally binary?

A possible answer may lie precisely in the observation that secondary stem-forming Finals are semantically quite abstract, mostly category- and argument-structure changing. This suggests that secondary-stem Finals are added very high in the functional structure. It may be that their inherent lexical-semantic richness directly precludes Medials from entering this high in the structure; hence too the absence of lexically-semantic richer Finals from secondary derivation as well. This suggests that the primary vs. secondary derivation contrast is not actually a fundamental distinction between two types of stem derivation, but rather just reflects a single system in which the licit structural entry point of a morphosyntactic element follows from the gradation along the lexical-to-functional cline of the syntactically relevant semantic features it carries.

In sum: traditional Algonquianist analysis has long identified a maximal triparticity constraint on stem-level structure, with more complex structures necessarily involving iteration of the fundamental constructional operation, and never directly engaging more than three elements at each such iteration.

Maximally tripartite stem-subcomponent structure I: Premedials and Prefinals = adjuncts

We now turn to the maximal triparticity of stem-subcomponent structure. Again, in this paper we omit further discussion of Initials and focus on the internal structure of Medials and Finals.³ Here once more the standard literature (exemplified in Rhodes 1980 and Valentine 2001:333) consistently identifies a maximally tripartite structure holding for both Medials and Finals:

(7) Maximally tripartite stem-subcomponent structure

Medial =	Premedial-Medial-Postmedial
Final =	Prefinal-Final-Postfinal

A terminological note is in order. The *-Final* and *-Postfinal* components are often termed *concrete Final* and *abstract Final* respectively (Rhodes 1980, 1998). The distinction seems to be wholly notational, since, for example, both *-Medial-* (in the subcomponential sense) and *-concrete Final-* elements are generally treated as the lexical cores (read: Root) of their respective constructions, just as the *-Postmedial* and *-abstract Final* are the elements uniquely characterizing each class of subcomponent---with the abstract Final in particular being explicitly taken to introduce syntactic argument structure and category to the collocation. As we will see, the Postmedial appears to have a comparable function.

In the remainder of this section, we will examine stem-subcomponent structure using the hypothesis that a uniform maximally tripartite configuration holds for both, specifically of the structural form [*adjunct-Root-light element*]. This corresponds directly to the traditional analysis in (7); the mapping is in (8).

(8) Maximally tripartite stem-subcomponent structure, syntactically characterized

Medial =	Premedial-Medial-Postmedial =	adjunct-Root-light noun
Final =	Prefinal-Final-Postfinal =	adjunct-Root-light {noun, verb}

Note in particular the predictions for each component: that the first will bear a categoryless, purely modificational function in accordance with its adjunctive status; that the second will carry substantial,

encyclopedic, rich lexical semantics; and that the third will, as just mentioned, introduce syntactic argument structure and category.

An example of Prefinals demonstrates precisely how a maximally tripartite analysis can accurately capture the constituency of complex configurations of non-Initial material. Consider the surface stem *təmik^wəhtəh^o* 'chop NA's head off' (9a), formed with Initial *təm-* 'sever(ed)' collocated with a non-Initial complex *-k^w.e-əhte-ah.^o* 'act on NA's head by striking'. Compare then an independently attested instance of the Final complex *-əhte-ah.^o* 'act on NA by striking', occurring in the stem *təmihətəh^o* 'cut NA in half with an axe, blow' (9b), with same Initial *təm-* 'sever(ed)'---suggesting an independent constituency to said Final complex.

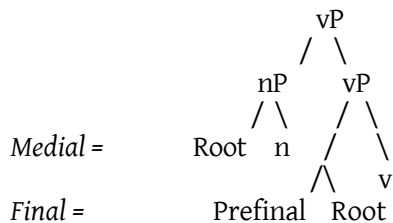
(9) Prefinal *-əhte* 'striking' in apparently quadripartite collocation

- a. *-k^w.e-əhte-ah.^o* 'chop NA's head off' Medial-Prefinal-Root.LV^d
nətəmik^wəhtəhα '[...] I cut off his head with a blow' (PD:c.465)
- b. *-əhte-ah.^o* 'strike NA' Prefinal-Root.LV^d
nətəmihətəhα 'I cut him in half with an axe, blow' (PD:c.465)

This independent constituency allows us to properly chunk this surface-quadripartite [-Medial-Prefinal-Root-Postfinal] structure via the one process permitted by maximal triparticity: iteration.

That is, we reduce the immediate structure to a sub-quadripartite one by treating the components of the Final as one, i.e. [-Prefinal-Medial-Postfinal] forms a constituent to the exclusion of the Medial. This reduces the working structure to a licit bipartite [-Medial-Final], taking the overall stem structure to tripartite [Initial-Medial-Final]. This is of course so far just a restatement of the standard approach; what we need to and distinctively will do now is capture the constituency dependency that the structurally intermediate-level Medial does have with the Final. This could in principle create a maximal triparticity violation. Not, however, if the Prefinal is adjoined into the first-merged Root, creating the resulting light-verb-organized structure in (10), which is able to host the Medial as a predicate modifier (cf. Wiltschko 2009) while still conforming to maximal triparticity.

(10) Prefinals as Root-adjunct to first-merged Root



Finding a licit structure under maximal triparticity here thus requires going *down* a fractal scale, adjoining at the Root level. While this seems like the road to infinite regression, one point makes it solid: as this structure predicts, Prefinals typically do have a very close lexical-selectional relationship with the first-merged Root, and virtually never collocate directly with the light verbs (cf. Goddard 1990:468-469):

(11) Prefinals: close lexical-selectional relationship with the first-merged Root

- a. Prefinal *-əhte* 'striking'

	- <i>əhte-hs.in</i>	'NA fall'	- <i>hs.in</i>	'NA be prone'
	- <i>əhte-əl.aw</i>	'strike NA w/projectile'	- <i>əl.aw</i>	'fire projectile at NA'
	- <i>əhte-əhk.aw</i>	'collide bodily with/kick NA'	- <i>əhk.aw</i>	'act on NA with body'
b.	Prefinal - <i>αčk^w</i>	'dragging'		
	- <i>αčk^w-h.al</i>	'drag NA'	- <i>h.al</i>	'change NA (in state, position)'
	- <i>αčk^w-pVh.^o</i>	'drag NA (?sharply)'	- <i>pVh.^o</i>	'grab NA (sharply [<i>bleached</i>])'
c.	Prefinal - <i>ahkase</i>	'burning'		(cp. Goddard 1990:469:(96, 97))
	- <i>ahkase-əs.^o</i>	'burn NA'	- <i>əs.^o</i>	'act on NA with heat'
	- <i>ahkase-əs.i</i>	'NA burn [middle/anticaus]'	- <i>əs.i</i>	'NA be in heated state/process'
	- <i>ahkase-ət.e</i>	'NI burn [middle/anticaus]'	- <i>ət.e</i>	'NI be in heated state/process'

Prefinals are in fact strikingly unproductive, most only associating with a handful of Roots at most. This makes sense if they are fundamentally lexically-syntactically structurally dependent on those Roots. In fact, only one of the Prefinal Roots given above attests outside of these Prefinal collocations: *-ahkase*. This root being derived---by the common loss of initial sonorant and alternation of weak vowels /ə a/--- from Root *məhkase-* 'coal, ember, black':

(12) Root *məhkase-* 'coal, ember, black'

a.	mkàse NA: 'live coal, ember'; NI: 'burnt out coal' (PD:282)	məhkase.w Root.LN
b.	mkàses NI 'ember, small coal, small live coal' (PD:282)	məhkase.s Root.LN_DIM
c.	mkàsehs NI 'charcoal, dead coal' (PD:282)	məhkase.əhs Root.LN_AUG
d.	mkàsess NA 'crow (<i>Corvus brachyrhynchos brachyrhynchos</i>)' (PD:282)	məhkase.w.əhs Root.LN.LN_AUG

We note in passing that (12d) engages the derived Initial *məhkase-w-*, whose only attested meaning is 'black'. This is predicted under the present account, as maximal-level light noun *-w* structures a maximal domain (= Spellout/Encyclopedia interface, in the sense of Marantz 1997) that "fixes" the semantics specifically to 'black', and no other meaning of the Root (cf. Arad 2003, Borer 2005ab).

(13) Derived Initial *məhkase.w-* 'black'

mkaséwihle 'he turns black' (PD:283)	məhkase.w-hl.α-[w] Root.LN-go.LV ^{NA} -W
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The maximal triparticity account predicts precisely the lexical-collocational properties attested for Prefinals.

Distinctive Premedials, in contrast, are a rarely thinly attested set, and therefore that much poorly understood. The only non-classificational (cf. Goddard 1990:468) Premedial we know to be cited in the literature is PA *-*α-* element (Goddard 1990:466:ft41, Denny and Mailhot 1976). It can be seen as *-α-* in Penobscot Medials like Pb *-α.təp.e-* 'head' (14b), which contrasts with the related dependent noun stem *-təp* 'head' seen in (14a).

(14) Noun Final and Medial

a. noun stem *-təp*

nətəp
'my head'

nə-təp
1-head

b. Medial *-α.təp.e-*

k^wask^wαtəpəhtəhα-
'strike NA on the head to death'

k^wask^w-α.təp.e-əhte.ah.^o.α-
to_death-PrM.head, LN-striking-by_tool, LV^d.DIR

This Premedial *-α-* is not in fact distinctive to Medials: it is also a component of the nominal Final *-α.təp* 'head'.

(15) "Premedial" *-α-* in nominal Final *-α.təp*

wasákətəp
'skull' (PD:475)

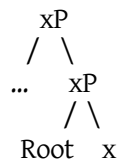
wasak-α.təp
empty-PrM.head

The fact that a homophonous PA **-a-* needs to be set up as both a Premedial and a Prefinal as well is expected under the present analysis: the Pre{medial, final} component is simply an adjunct to the first-merged Root. As such, it should have no categorical constraints on what it can collocate with, while at the same time showing a close lexical association with its host Root. And this is indeed what we find.

Maximally tripartite stem-subcomponent structure II: Postmedials and Postfinals = light elements

There is no real question that Postfinals are the effective syntactic categorizers for Finals (cf. Rhodes 2006, 1980). Hence for example there are nominal Finals formed by merging Roots directly with the light noun element, giving nominal Finals of the form [*Root-light noun*], contrastively paired with matching verbal Finals in [*Root-light verb*].⁴

(16) [*Root-light noun*] and [*Root-light verb*] Final pairs



x = {v, n}

a. v-Final:
n-Final:

-atən.e-
-atən.w-

'NI be ... mountain'
'mountain'

ktàtənok
'at/on the large mountain' [Mt. Katahdin] (PD:225)

kəht-atən.w-ək
great-mountain.LN-LOC

pəmatəne
'1) the hill/mountain extends;
2) there is an extent of hills/mountains' (PD:373)

pəm-atən.e-[w]
along-mountain.LV^{NI}-W

b. v-Final:
n-Final:

-ahkamik.e-
-ahkamik.w-

'NI be ... land'
'land'

niwahkámike 'it is a dry land, it is an arid country' (PD:329)	niw-ahkamik.e-[w] dry-land.LV ^{NI} -W
niwáhkamik ^w NI 'desert' (PD:329)	niw-ahkamik.w dry-land.LN

Indeed, the very contrast of Medial versus Final depends upon this categorization effect. Thus we find numerous pairs of Medial and Final that differ only in the addition of a categorizing/argument-structuring light-element Final.

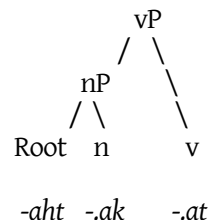
(17) Medial and Final pairs

a.	Medial:	-aht.ak-	'CORD'
	Final:	-aht.ak-.at	'NI be ... cordlike object'
	atəpahtákənike 'he winds, does winding' (PD:85)		atəp-aht.ak-ən.k.e-[w] wind-cord.LN-by_hand.gnrc_obj.DO ^{NA} -W
	kíntakat~kináhtakat 'it is a large string, rope, hair' (PD:211)		kin-aht.ak.at-[w] big-cord.LN.LV ^{NI} -W
b.	Medial:	-əp.ek-	'LIQUID' (-əp.ek- < PA *-epy.ak-)
	Final:	-əp.ek-.at	'NI be ... liquid/water'
	mətəpékəłəmsən 'the water is agitated by the wind' (PD:262)		mət-əpek-əłəm.Vhs.ən-[w] moved-water.LN-wind.wind.LV ^{NI} -W
	kínəpekət 'it is a great expanse of water' (PD:209)		kin-əp.ek.at-[w] big-water.LN.LV ^{NI} -W

In these cases, the explicit Medials (found in the first of each example) are precategorical classifier-like elements, while the corresponding Finals (found in the second of each example set) are verbal formatives with very similar semantics. The Final, then, adds stem-level functional structure.

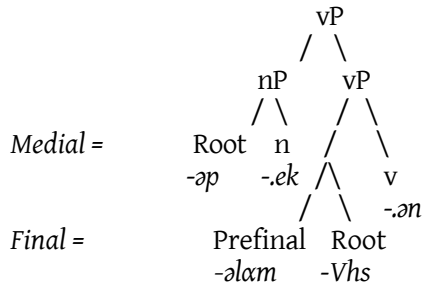
In these instances, where the Final evidently consists only of a light verb (with no or a zero Root), it is difficult to determine for certain that the whole collocation is not simply a complex Final. This ambiguity is expected from the structure, since the scopal relationship between the light verb and the Medial is the same whether the Final complex has a Root or not.

(18) Final vs. Medial-Final ambiguity



Contrast this with a stem such as *mətəpékəłəmsən*- 'the water is agitated by the wind' (19), where the Final is tripartitely "maxed out" by a full [*Prefinal-Final-Postfinal*] collocation of *-əłəm.Vhs.ən* '-wind.wind.LV^{NI}', and as such, the independent status of the Medial is clearer.

(19) Final vs. Medial-Final ambiguity resolved



Perhaps the most striking case of this is in the fact that many Medials build a corresponding nominal Final by apparently "stacking" the Postmedial intermediate-level light noun *-ak* with a maximal-level Final light noun in *-w*, putatively cognate to the familiar PA **-w* creating deverbal nouns (Bloomfield 1962:418, Goddard 1974:324-325, Quinn 2006:198-200; cf. also Mathieu 2008:13; and Goddard 1990:467-468).

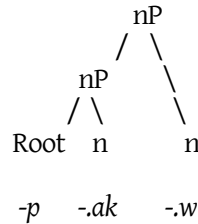
(20) Nominal Final from Medial

a.	Medial:	-p.ak-	'leaf'
	Final:	-p.ak.w-	'leaf'
	sekatepákahte		sekate-p.ak-aht.e-[w]
	'the leaf is placed in flattened position, depressed' (S:23:44)		flattened-leaf.LN-seated.LV ^{NI} -W
	sekátepak ^w		sekate-p.ak.w
	'Rugel's Plantain [CQ: gloss not certain]' (S:23:44)		flattened-leaf.LN.LN
b.	Medial:	-əp.ek-	'LIQUID' (-əp.ek- < PA <i>*-epy.ak-</i>)
	Final:	-əp.ek.w	'body of water'
	mətəpékələmsən		mət-əpek-əlɔm.Vhs.ən-[w]
	'the water is agitated by the wind' (PD:262)		moved-water.LN-wind.wind.LV ^{NI} -W
	kinəpek ^w		kin-əp.ek.at-[w]
	'1) large body of water, 2) Merrymeeting Bay' (PD:209)		big-water.LN.LN

Rather many such [Medial, nominal Final] pairs exist: *-ahtak-*, *-ahtak^w* 'cordlike object'; *-əlak-*, *-əlak^w* 'hole'; *-ənak-*, *-ənak^w* 'island'; *-əčak-*, *-əčak^w* 'sticky mass'; *-ewak-*, *-ewak^w* 'piece of meat'; and *-ahsak-*, *-ahsak^w* 'piece of wood', among others.

Notably, the elements *-p* and *-əp(y)* identified as Roots in (20) can be confirmed as such diachronically, since Penobscot still attests the source stems *mipi-* (cf. *mipi* NI 'leaf' (PD:281) and *nəpi-* (cf. *nəpi* NI 'water' (PD:319)). These each delete their initial consonant by regular process, and idiosyncratically drop (or fail to add) their final vocalism (cf. Goddard 1990:453 on somewhat similar patterns in the derivation of Initials); the /i/ in the *-ip-* resulting from *mipi-* readily analyzes out as the regular epenthetic. Identifying the core lexical Root allows us to treat the remaining components as functional structure, giving the interesting doubly-nominalized structure for such Finals sketched in (21).

(21) Doubly-nominalized structure in Finals



The contrastively nominalizing effect of Final *-w* seen in (16) above establishes it as a categorizing light element, i.e. in this system, a maximal-level light noun, as per the structure in (21). The same structure, however, leads us directly to ask why we even presume to set up Postmedial *-.ak* as an intermediate-level light noun, rather than just some purely formal morphological element.

First off, there is the matter of analytical consistency: to do so would be to leave Postmedials as the only purely formal element operating in the system. In particular, it would ignore the possibility that the morphological-structural parallel with Postfinals as terminal elements of their respective subcomponents might indicate a syntactic-structural parallel as well.

Decisive evidence showing that the Postmedial is an intermediate-level light noun is inherently difficult to present, since it is in the nature of an intermediate-level functional element that it is not the category-determining component of the overall stem. Hence, for example, the surface acategoricity of Medials. How, then, are we to know that a Medial carrying Postmedial *-.ak* is an intermediate-level nominal (creating a semi-categorical nP) and not simply a complex Root?

Three points of evidence suggest that the former is the case.

First is that in at least one instance, Postmedial *-.ak* appears to fix the sense of precategorical Root, preventing it from freely varying between property-denoting and entity-denoting senses (as it does on its own), and instead narrows it down to the shape-classification of entities. In (13) above, we briefly noted a Root-semantics fixing effect with maximal-level Final *-w*; here now we start with a comparable precategorical Root (*w*)*αl-* 'concave, hollow, hole' that is well-attested in Penobscot (see again the Root-initial consonant deleting when not in an Initial):

(22) Precategorical Root (*w*)*αl-* 'concave, hollow, hole'

a.	w ^α lahkámike 'there is a valley' (PD:450)	w ^α l-ahkamik.e-[w] hollow-land.LV ^{NI} -W
b.	w ^α l ^h akamik ^w NI 'valley, hollow, doles' (PD:450)	w ^α l-ahkamik.w hollow-land.LN
c.	w ^α late NA 'dish, plate' (PD:450)	w ^α l-ate hollow-belly
d.	w ^α ličo NA 'birch bark or wooden container, hollow dish' (PD:450)	w ^α l-čo hollow-container
e.	w ^α lke 'he digs, hollows out, excavates' (PD:451)	w ^α l-əhk.e-[w] hollow-do.DO ^{NA} -W
f.	kís ^α lke 'he has made a cache, has finished burying something' (PD:214)	kis- ^α l-əhk.e-[w] finish-hollow-do.DO ^{NA} -W

On its own, the Root (*w*)*αl-* wobbles fuzzily between property (22a-d) and entity denotations (22e-f), as expected for a bare Root. In collocation with Postmedial *-.ak*, however, the resulting semantics are

"fixed" to the entity sense of 'hole, cavity'. This is the source of the classificational Medial *-ak*- 'HOLE', attested as an clear Medial in (23a, b), and as a Medial collocated with (possibly into) a light verb Final in (23c):

(23) Precategorical Root *(w)al-* 'concave, hollow, hole' plus Postmedial *-ak* = 'hole'

a. *nəkəpəlákəhα* nə-kəp-al.ak-ah.^o.α-[w]
 'I close the opening of him, close the hole
 in him' (PD:190) 1-blocked-hollow.LN-by_tool.LV^d.DIR-W

cf. *nəkəpahα* 'I close him' (PD:191)

b. *nətasik^wəlákəhα* nə-asik^w-al.ak-ah.^o.α-[w]
 'I ream him' (PD:77) 1-reamed-hollow.LN-by_tool.LV^d.DIR-W

cf. *nətásik^whα* 'I plunge something through him' (PD:77)

c. *kínalakat* kin-al.ak.at-[w]
 'it has a large hole, there is a large
 hole in it' (PD:208) big-hollow.LN.LV^{Nl}-W

Particularly telling is the existence of a noun stem meaning 'hole' that is derived from little more than *(w)al-* 'concave, hollow, hole' plus Postmedial *-ak* = 'hole' (cf. Goddard 1990:463:(65)).

(24) Nominal stem *walak^w*- 'hole'

wàlak^w wàl.ak.w
 NI 'natural hole in ground or tree, rock
 (not in clothes), hole of animal burrow (PD:453) hollow.LN.LN

Ultimately the nominal status of stem *walak.w-* is attributable to the maximal-level light noun Final *-w*, which sets it in structural parallel with other [*wal-Root.w*]-derived stems:

(25) [*wal-Root.w*]-derived stems

wal-ahkamik.w- 'valley [...]' (cf. (22) above)
wal-ahpask.w- 'hollow stone' (cf. *waláhpask^w* NI 'a concave, hollowed out stone' (PD:453))

Following the parallelism to its end leads to the conclusion that Postmedial *-ak* is at least a nominal-type Root in origin, parallel to Roots *-ahkamik* 'land, earth' and *-ahpask* 'rock, stone'. Assuming as we do that light functional elements generally develop from lexical Roots (cf. especially the cline from nominal stem to classifier), this is expected.

The shape-classificational function of Medials seen exemplified in (23) is extremely robust (see especially Drapeau 2008). Given that cross-linguistically, classifiers are a semi-functional (read: structurally intermediate-level) category typically drawn from and tightly associated with nominals, assigning an intermediate-level-nominal status to Postmedial *-ak* captures its ability to derive functional-structural quasi-nouns: elements with enough entity-like properties to match and classify full nominal arguments of the stem, but without the ability to function as complete nominal arguments themselves.

Algonquian classificatory Medials show the same distinctions of shape-classification known familiarly from East/SE Asian-areal languages such as Mandarin, Hmong Daw, and Thai (26). Notably, Algonquian shape-classifying Medials are morphologically separate from verbal Roots of handling and stance, unlike in Athabaskan languages, even as they form much the same lexical collocations. Hence in

Penobscot we find classificatory Medials contrasting the same basic features of dimensional rigidity (STICK vs. CORD vs. SHEET vs. LUMP/ROUND OBJECT), as well as negative dimensionality (HOLE) and textural manifestation (GRANULAR vs. SOFT/STICKY MASS vs. LIQUID).

(26) Classificatory (shape-classifier) Medials

- <i>ahk</i> ^w -	'1D RIGID OBJECT' (< 'tree, stick')	cf. Md 枝 zhī, HmD tus
- <i>aht.ak</i> -	'1D NON-RIGID OBJECT' (< 'cord, string')	cf. Md 條 tiáo, HmD txoj
- <i>ek</i> -	'2D NON-RIGID OBJECT' (< 'skin, hide')	cf. Md 張 zhāng, HmD daim
- <i>ahpask</i> -	'3D/ROUND OBJECT/LUMP' (< 'rock')	cf. Thai ฐึน lûuk
- <i>al.ak</i> -	'HOLE' (< 'hole')	cf. HmD qhov
- <i>amk</i> -	'GRANULAR MASS' (< 'sand, gravel')	
- <i>áč.ak</i> -	'SOFT/STICKY MASS' (< 'excrement')	
- <i>ap.ek</i> -	'LIQUID' (< 'water')	cf. Thai น้ำ náam

These are exemplified in (27).

(27) Classificatory Medials

a. -*ahk*^w- '1D RIGID OBJECT' (< 'tree, stick')

nətésahk ^w təhə	'I pierce him, run him through with a spear'	(PD:453)
kinahk ^w álane	'he (bird) has a long tail'	(PD:207)

b. -*aht.ak*- '1D NON-RIGID OBJECT' (< 'cord, string')

səkhəhtákíhleh	'he (snake, worm) squirms, wriggles into view'	(PD:417)
matehtakíhtəhsən	'there is the sound of throbbing (as when a bowstring flutters)'	(PD:255)
cf. matéhtəhsən	'it makes the sound of an impact'	(PD:255)

c. -*ek*- '2D NON-RIGID OBJECT' (< 'skin, hide')

matékələmsən	'it (fabric, sheet, hide, tent) is moved by the wind'	(PD:262)
cf. mətələmsən	'it (a solid object, stick, twig, door) is moved by the wind'	(PD:262)

d. -*al.ak*- 'HOLE' (< 'hole')

nəkəpəlákəhə	'I close the opening of him, close the hole in him'	(PD:190)
cf. nəkəpəhə	'I close him'	(PD:191)

e. -*ahpask*- '3D/ROUND OBJECT/LUMP' (< 'rock')

wəsəkháhpskəhəsən	'she came waddling forth (Sbd)'	(k&p:4)
kináhpskatəpe	'he has a big round head'	(PD:207)

f. -*amk*- 'GRANULAR MASS' (< 'sand, gravel')

kətəwámkihpə	'he eats with a sandy or grinding noise'	(PD:201)
pəmámkihle	'II: it is a stretch, an extent of sandy, gravelly beach; AI: he goes along the beach, proceeds along the beach'	(PD:374)

g. -*áč.ak*- 'SOFT/STICKY MASS' (< 'excrement')

kəlaməčákihle	'he/it is sticky, viscous'	(PD:187)
cf. kəlámihle	'he/it is adhesive, clinging, adherent'	(PD:187)
matečákihpo	'he makes an unpleasant noise in eating'	(PD:255)

h. -əp.ek- 'LIQUID' (< 'water')

nəmatəpékənəmən	'I stir it (water)'	(PD:262)
cf. nəmátənəmən	'1) I fight it, 2) I move my hand, I move it with my hand'	(PD:262)
matepékələmsən	'there is rippling of the water by the wind (audible)'	(PD:255)
aləpektáhike	'he splashes (so)'	(PD:47)

To the best of my knowledge, East/SE Asian-areal classifiers are uncontroversially nominal. Asserting otherwise for the semantically and functionally parallel Algonquian classifiers would therefore require positive motivating evidence, which is lacking.

Finally, Medials exhibit nominal-like properties in that an equally substantial set carry out prototypically noun-based functions--namely, acting as stem-level elements carrying notional argument roles like theme, instrument, and locative (cf. Wiltschko 2009:214).

These include Medials naming the instrument involved in the verbal event structure (28),

(28) Medials: instrument-naming

nəməlak ^w ámkəhə	'I cover him with <u>earth, soil</u> '	(PD:274)
nəməlak ^w ipákəhə	'I cover him with <u>leaves</u> '	(PD:274)
nəməlak ^w ipisákəhə	'I cover him with <u>bushes</u> '	(PD:274)
məlak ^w askihkəwáhoke	'he lies covered with <u>grass</u> '	(PD:274)
məlak ^w ékhosə	'he pulls the <u>covers</u> over himself'	(PD:274)
nəkəpáhkehkəwə	'I block/obstruct his passage with <u>earth, dirt</u> '	(PD:190)
nənāčī-kələpkéhtəhə	'I go frighten them out' [CQ: by hitting the <u>ground</u>]	(S:30)
cf. nəkaláptəhə [sic]	'I (purposely) frighten an animal away.' [sic: I...him]	(S:30)

along with Medials naming other oblique, locative-nominal notions like an embedding medium (29),

(29) Medials: embedding medium

nəkətəlayákhamən	'I remove <u>snow</u> from it, I uncover it from <u>snow</u> '	(PD:183)
wəčkawəlayákhosə	'he approaches through the <u>snow</u> '	(PD:461)
ketələk ^w hike	'he removes something, things from the <u>ice</u> '	(S:30)

and, similarly, also Medials naming the means/medium through which event manifests--an extension of the basic concept of instrumental--(30),

(30) Medials: extended instrumentals

wəsəkhi-kətəwələk ^w ihlən	'he came into view in the sound of crackling <u>ice</u> '	(S:30)
matélək ^w ihle	'the <u>ice</u> makes a noise in moving or cracking, the <u>ice</u> sounds, there is a sound of moving ice'	(PD:255)
matélək ^w ihtən	'the <u>ice</u> roars in the current, there is a sound of <u>ice</u> flowing in the water'	(PD:255)
matkəmikíhpote	'the <u>earth</u> trembles, there is an <u>earthquake</u> '	(PD:262)
alihkəwákihle	'he/it <u>bleeds</u> '	(PD:50)

and, finally, naming the notional object being acted upon--often the object that names the activity (31).

(31) Medials: notional object of activity

talahkəlosənáhike	'he is making a <u>fence, stockade</u> '	(PD: 449)
alahkáhike	'1) he tills, cultivates the <u>soil</u> , 2) he hoes'	(PD:32)
alaskəsəwe	'he mows, cuts <u>grass</u> '	(PD:35)
alikh ^w ekátike	'he chews <u>gum, pitch</u> '	(PD:50)

In short, the Medials in (31) act as notional themes. Indeed, these stems epitomize Mithun 1984:848's name-worthiness criterion for noun incorporation, with the Medials' contribution matching that seen in incorporated nouns in other languages (cf. Baker 1988, 1996). These, combined with the more oblique argument-like properties also seen in (28)-(30), again suggest at least a prototypical nominal-type semantics for Medials.

To these we must also add the extensive, high-frequency set of Medials naming involved body parts. This too suggests at least a quasi-nominal analysis for Medials, since this is also a very common class of nominal incorporant (Mithun 1984:858). In (32) we see examples of body-part Medials participating in part-whole relationships with the core (= notional absolutive) argument of the stem, be it transitive (32a) or intransitive (32b):

(32) Medials as incorporated body-part nominals

a. Body-part Medials: transitive: part-whole relations with core argument

wək ^w ask ^w atəpéhətəhən	'he struck him dead on the <u>head</u> (Sbd)' [CQ gloss]	(késihlát:24)
cf. nək ^w ásk ^w təhə	'I kill him with a blow (by axe, club, etc.)'	(PD:231)
nəkələtonépila	'I tie his <u>mouth</u> (with string, cord, thong)'	(PD:186)
cf. nəkəlápila	'I tie him, tie him up, tether him'	(PD:186)
nəməsáləwəphə ⁵	'I catch him quickly by the <u>tail</u> , I grab him by the <u>tail</u> '	(PD:275)
cf. nəməsiphə	'I catch him'	(PD:275)

b. Body-part Medials: intransitive: part-whole relations with core argument

matələwéhposo	'he wags his <u>tail</u> '	(PD:262)
pilsəsítehle	'his <u>foot</u> is numb, becomes numb'	(PD:396)
milihptinétotam	'he gestures, talks with his <u>hands</u> '	(PD:281)
sehsalakik ^w elámsoke	'the wind makes his <u>eyes</u> water, his <u>eyes</u> water from the wind'	(PD:422)

This is a common and well-documented feature of body-part-denoting incorporants (cf. especially Drapeau 2008 and Wiltschko 2009). The key here is that it is impossible to be a part in relation to a whole without being at least an entity (and, crucially, not just a property). So participation in part-whole relations supports the claim of at least semi-nominal, generic-entity-denoting status for Medials---again, precisely what the intermediate-level light noun model predicts the Postmedial to provide.⁶

These classes of Medials strongly suggest that Medials are more than just underspecified Roots, and are instead light-noun headed collocations, bound within stem structure as non-individuated quasi-arguments, i.e. neither bare Roots nor maximal-level syntactic full nominals, but instead, something precisely in between: intermediate-level nominals.

Despite the fact that Wiltschko 2009's characterization of Halkomelem lexical affixes sets up classificatory and other comparable incorporees explicitly as bare Roots, the present analysis is not in fact in substantial conflict with hers. Indeed, intermediate-level nominals are, as we have noted, frustratingly Root-like, because minimal (Root) and intermediate (Postmedialized) structures share the common feature of non-maximality. Thus the only real predictational difference is that the present analysis leaves open the possibility of a contrast of another degree of effective bareness in elements that function as Root-like predicate modifiers. This remains to be more deeply investigated empirically.

It is worth noting that the general claims of most accounts of noun incorporation (Baker 1988, 1996 et al.) and of bare noun + light verb constructions (Grimshaw and Mester 1988, Öztürk 2005) set both up as syntactically minimal nouns, bereft (except in certain special and still fairly controversial cases) of definite reference and typically also of other functional-structure-provided contrasts like full grammatical number. This is in the neoconstructionist (Marantz 1997, Arad 2003, Ramchand 2008) system the very definition of a syntactic nP; and to claim that syntactic object is an nP is to assert that its precise structure is of a Root plus a light noun.

In Algonquian languages, this can be seen first and foremost in the frequent presence of overt light noun morphology at the terminal edge of the Medial complex, i.e. Postmedials. We of course lay no claim that the Medial-deriving light noun must be overt, no more than we would claim it for stem-categorizing light elements in Finals, since certainly not all categorical nominal stems show an overt light noun in their Final (see (15), for example). And indeed the original argumentation for the notion of light elements has mostly been made from English, where the bulk of light elements are, by analysis, non-overt. We do however take the instances in which these elements are overt as exemplars of the overall system.

Here again the maximal triparticity model constrains relations between subcomponents of Medials and Finals in precisely the directions we find attested---setting up a tripartite contrast of {*minimal, intermediate, maximal*} (and, additionally: *iterated*)---while doing same for relations between Medials and Finals themselves.

The Northern Iroquoian connection

We are now able to turn to the interesting parallel mentioned at the very beginning of this work. Namely, that Northern Iroquoian languages also often tack on an additional element to notionally nominal incorporees. This element is in fact often explicitly glossed as a *nominalizer* (Hopkins 1988, Baker 1997, Abbott 2006, inter alia), evidently because of its association with the formation of deverbal noun stems (33).

(33) Nominalizer *-hser/tsher-*

- | | | |
|----|--|---|
| a. | khyatúhsera
'book' (H88:195:(3.171)) | ka-hyatu-hser-a?
ZA-write- <u>nom</u> -nsf |
| b. | khyatons [CQ: = khyá:tus]
'I write' (Maracle 1993:37) | k-hyatu-s
1A-write-hab |

Notice in (33a) that in fact the stacking of two nominalizers [*-nom-nsf*] is required. This exactly parallels the light nouns stacking to form *-ak.w* observed in (21). We now have a surface-morphological parallel between this nominalizer *-hser/tsher-* and Postmedial *-ak-*; what remains to be seen is if the parallel goes deeper.⁷

It does. A further class of deverbal noun stems does not need *-hser/tsher-* in forming a freestanding noun stem, but does require it when incorporated:

(34) Incorporation requiring use of nominalizer *-hser/tsher-*

- | | | |
|----|--|--|
| a. | stem <i>atyatáwí-</i> 'jacket' | |
| | yotyatáwísherv̄:tv [sic] ⁸
'a jacket is hanging' (H88:197:(3.182)) | yo-at-ya?t-a-wi-tsher-v?t-v
ZP-srf-body-J-be in a cylinder- <u>nom</u> -be hanging-stat |
| | atyatáwí
'jacket' (H88:196:(3.179)) | (w)-at-ya?t-a-wi-
ZA-srf-body-J-be in a cylinder |

the strong areal tendency to name artifacts from verbs), it is certainly a stretch to expect the same for 'beer' and 'tea'. A less strained account is that they are borrowed as Roots, i.e. as (to rework Wiltschko 2009:205) absolutely nothing more than pure pairings of phonological and semantic features, i.e. solely simple sound-meaning correspondences. Which are then assimilated into the morphosyntactic system by the obvious candidates for functional intermediaries: native intermediate-level light nominal elements.

The use of nominalizer *-hser/tsher* thus tracks Postmedial *-ak* both in double-layer light nominal stacking and in incorporation. This set of correspondences is unlikely to be coincidental. Indeed, while the present model offers at least a preliminary account, under any analysis, these parallels deserve notice.

Conclusion

Numerous questions remain to be answered in this analysis. First and foremost is the matter of the other Postmedial in PA **-e*, seen as the *-e* element in Penobscot examples such as the body-part Medials in (32) and some of the quasi-argument Medials in (28)-(31)---assuming that the two are one and the same element, which is itself contestable. There are a number of different directions one can take the analysis of Postmedial **-e*. Namely, that it too is a light nominal (cf. the lightish nominal in PA **-ay~-e* evident in Munsee *nhákay* NID 'my body (O'Meara 1996:64) and Pb NID *nhàke* 'my body [...] (PD:7)); or that it is a light verbal element, since a number of NA and NI light verbs have a clear light verb/Postfinal in PA **-e*. Putting aside the analytical consequences of those claims, the simple problem is that the morpheme in question is a monosegmental vowel, and as such, is very difficult to defend against counter-claims of coincidental homophony.

Also still to be resolved is the precise contrast between a minimal Root and an intermediate-level light-nominalized/-verbalized element. We have seen some preliminary evidence in the form of the Medials and Northern Iroquoian incorporants, but a strong contrastive case that might clarify the predicted distinction has yet to emerge.

What we have done at present is offer a structurally constrained model (maximal triparticity) that has its base in a rich range of seemingly unrelated data (e.g. maximal triparticity in referential chains and in pronominal feature contrasts), one that at the very least lines up well with the long-observed maximal triparticity of stem-level and stem-sub-component-level internal constituency.

Even if the present analysis ultimately does not hold, it is hoped that it has succeeded in convincing the reader that the set of morphosyntactic patterns examined here---and particularly the smaller bits often written off as purely formal elements---are well worth our attention if we wish to better understand not just incorporation and polysynthesis, but the lexical-functional interface in general.

Notes

¹ Here I introduce the convention of capitalizing the morpheme-structural terms "Initial", "Medial", and "Final", both to highlight their analytical status and also to retain the lower-case equivalents more clearly and strictly as terms referring to position in the wordform.

² Rhodes 2003:2 introduces a further contrast between stem-internal and non-Medial incorporation, with the latter also being discussed at length in Hirose 2003. If the latter type is treated as secondary derivation (as per Rhodes 2003), it poses a problem for the upcoming tentative explanation for the absence of Medials in secondary derivation---but not if recast as a type of primary derivation. Otherwise, this additional distinction requires no modification to the basic maximal triparticity account.

³ Specifically, it is because Initials are the open class, and the primary locus of iteration, and also because their syntactic relation to the Medial-Final complex is surface-ambiguous (see Goddard 1990 and Brittain 2003 for extensive discussion) that the defense of maximal triparticity in the internal structure of Initials becomes too involved to lay out here. As far as we can tell, doing so requires no new principles, so reader should be able to take the present analysis of Medials and Finals and apply it directly to Initials.

⁴ In the present approach, transitive stems have the same basic structure, with abstract Finals acting as the light element. However, there is a (predicted) complication: that the transitive complex necessarily involves secondary derivation, bringing in an additional light verb---this being the traditional transitive theme (Goddard 1990:450:ft6)---which gives rise to precisely the iteration of functional structure needed to realize the complex argument structure of transitives. The details are fairly involved, particularly in how this approach deals with important asymmetries in the Transitive Animate vs. Transitive Inanimate contrast as specific configurations of argument-introducing light verbs, and not just simple concatenations of [±transitive] components. I refer the reader to Quinn 2006:ch. 2 for a complete discussion.

⁵ Ms. <naməsáləwəphə>, an obvious typographical error.

⁶ Contrast this with the mirror-opposite, hypernymic relation of incorporated classifier to core argument, a point noted by Wiltschko 2009. The much-discussed contrast between classificational versus quasi-argumental Medials (cf. Rhodes 2003, Drapeau 2008, Wiltschko 2009) raises the interesting question of what if any syntactic difference might be reflected therein.

⁷ Note in passing the further parallel: like in Algonquian languages, the corresponding verbal stem again needs only a single layer of light verbal material---albeit in this family, evidently comorphologized with aspectual and Force material.

⁸ It is unclear to me why the nominalizer realizes as *-sher-* and not as *-tsher-* or *-hser-* in the data reported here.

⁹ I thank Ives Goddard for pointing out this possibility after my 2008 Algonquian Conference presentation of this paper.

Abbreviations

1	1st person	nom, NOM	nominalizer
1A	1st person agent	NS/MSGO	≈ masculine gender patient
2	2nd person	nsf	noun suffix
3	3rd person	OBJ	object
AI	animate intransitive	obv	obviative
AI+O	AI taking Secondary Object	OTI	TI taking no object
Cj	Conjunct	o	diacritic rounding on weak vowels
DIR	Direct light verb	part	partitive
du	dualic	PERF	perfective
fact	factual	Pb	Penobscot
H	hinge	PrM	Premedial
hab	habitual	punc	punctual
HmD	Hmong Daw	Sbd	Subordinative
II	inanimate intransitive	srf	semireflexive
J, epen	joiner, epenthetic	stat	stative
LOC	locative	SUBJ	subject
LV	= v, in morpheme glosses	TA	transitive animate
LV ^d	dative-hosting light verb	TI	transitive inanimate
LV ^{NA}	light verb taking NA arg	W	W-ending (clause-type marker)
LV ^{NI}	light verb taking NI arg	v	light verb
LN	= n, in morpheme glosses	ZA	neuter-zoic gender agent
Md	Mandarin	ZP	neuter-zoic gender patient
n	light noun		
NA	NA gender class ("animate") = INAN	NI	NI gender class ("inanimate") = AN

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