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Part II: Studies in Native American Languages
PROTO-ALGIC III: Pronouns

Paul Proulx

Abstract: The Proto-Algic demonstrative roots (*w-, *y-) and locatives (*w-, *y-) had 3 inflectional endings, referring to spacial or temporal distributions of entities, and which evolve into the gender systems of Yurok and Algonquian. It had two discourse pronouns: *y- 'previously mentioned', and *t- 'known but not previously mentioned'. *y- is semantically associated with past time: *t- develops into Algonquian future markers. The AlgQN verbs of 'being (somewhere)' also all come from among these deictics. Proto-Algic also had a relative pronoun (*w-), instrumental in the development of some types of changed conjunct, and an associative deictic (*w- 'like another'), which produces a marker of obviation.

0. Introduction

In the previous papers of this series (Proulx 1984a, 1985), which include the reconstructions numbered 1-238, I sketched the phonology and the verbal morphology of Proto-Algic – the ancestor of Proto-Algonquian, Miwot, and Yurok – demonstrating the simultaneous reconstruction of features of protolanguages of the first and second order as interdependent variables. These papers, despite the methodological innovation involved, illustrated only well known theory about the structure and evolution of language. The present paper, however, is on a topic where our theoretical knowledge about the way languages evolve is growing rapidly – and it thus comes to confirm and elaborate recent theoretical insights.

Traditionally, the focus of Comparative Algonquian (and Algic) linguistics has been phonology, nouns, and especially verbs – and indeed much remains to be done in these areas. Nonetheless, attention of Algonquianists is now increasingly being turned to syntax and discourse analysis – and hence to the study of particles. However, particles are hard to study, especially from a diachronic perspective. Algonquian languages differ widely in their inventory of them, so that standard comparative reconstruction is seldom possible. One sense a at most, structural parallels. Evidently, Algonquian particles are historically unstable.

Luckily, this very unstability of Algonquian particles suggests a way of studying them: by combining comparative with internal reconstruction, using diachronic universal tendencies as a guide. Such work not only enriches our knowledge of Algonquian and Algic prehistory, it contributes to our growing understanding of the universals involved.

This paper did not begin as a study of particles, but of pronouns. As some of the demonstratives were reconstructed, it began to be apparent that in some of the languages there were particles that greatly resembled them in form. In other cases, one language had a particle which seemed to be a good match for a demonstrative in another. The literature on universals readily explained these similarities in a general way: in many languages of the world demonstrative pronouns are a source for a variety of cliticized particles (see Greenberg 1978). But the history of Algic is a long one involving many languages; there has been time for a great deal of evolution. In its course we see a variety of universal tendencies interacting together in complex ways — and some developments not previously reported as diachronic universal tendencies at all (though consistent with them).

In addition to its implications for linguistic universals, this paper proposes a hypothetical partial account of how animacy gender may have arisen in Algic (from MOTILE/STATIC categories), and of how initial change could have originated. If these accounts are indeed correct, and if they reflect universals rather than random historical developments, further work on universals may yet come to buttress them.

Besides the prior members of this series, this work rests upon my reconstruction of the demonstrative pronouns of Proto-Algonquian (Proulx 1988), and two other papers. The first (mentioned above) is a study of the universal diachronic tendencies of demonstratives by Greenberg (1978) — where he documents their frequent evolution into discourse pronouns, articles, and ultimately affixes marking such categories as gender and number or simple nominality.

The second is a detailed analysis of Cheyenne deixis by Leman (1984) — where he utilizes his long and intimate acquaintance with this language to trace the subtle semantic links among several of its morphological subsystems: demonstratives, discourse pronouns, locatives, markers of anaphora and cataphora, relative roots and preverbs, and the future tense.

Despite the attention necessarily given to deixis and universal tendencies in the present paper, however, it remains chiefly a reconstruction of the pronouns of Proto-Algic. An
attempt is therefore made at a full reconstruction, even though there are problems with some sets. The reconstruction of personal and interrogative pronouns (secs. 8 and 9) is particularly complex and uncertain, and some readers may prefer to skip these sections. There is no reason why they cannot do so. Somewhat better, but still based on weak evidence, are secs. 2 and 11 (respectively discourse pronouns and inflection). Again, the rest of the paper stands without them, except for part of sec.6 (temporals), which makes reference to the discourse pronouns.

1. Demonstrative Pronouns and Locatives

Demonstrative and locative pronouns are closely related synchronically in the Algonquian languages, with distal inanimate singular demonstratives often serving as special locatives and animate singulars as temporal ones. This close association between the two dates back to Proto-Algon, with individual pronouns moving from one set to the other in individual languages. The reconstructible demonstrative stems are:

(239) *wo 'this (restricted)'; PA *wə (sg. for both genders), Wyot wu 'this'.

(240) *wa 'this (personal, extended)'; PA *wa 'this (animate sg.)', PA *wə-[ in *wə-kə 'this (absentative animate sg.)'], Y wa-[ in wok and wa? 'this (personal)']. Cf. Wy 'still [at this time]'.

(241) *wa 'this (nonpersonal, extended)'; PA *wə-[ in *wə-kə 'this (absentative inanimate sg.)'], Y wa-[ in wok and wa? 'this (nonpersonal)'].

(242) *wo 'that (restricted)'; PA *wə: 'that (both genders), there', Y wy? 'there'.

(243) *wa 'that (personal, extended), then'; PA *wə 'that (animate sg.)', PA *wə-[ 'that yonder (animate sg.)'] [and *wə-[ in *wə-kə 'that (absentative animate sg.)']], Y wo-[ in wok and wo? 'that (personal), he or she, there']; Wy wa and wa? 'then (after doing various other things)', and Wy wəkə 'then (future)'. See Proulx (1988:sec.2.2) for prothetic PA *ə. Future fieldwork should attempt to distinguish Y wo? and wy? 'there' semantically.

The reconstructible locative stems are:

(244) *we 'proximal time'; PA *wə 'this (animate sg.)', Y wo 'when'.
(265) *wá 'distal time': PA *wá 'that (animate)', PA *wá 'then' (cf. Ná), PA *wá: 'that (animate, absentative)', Y no?ok and no?á 'then' [with locative -PK].

(266) *ni 'distal space': PA *ni 'there (nonremote), that (inanimate sg.)', Y ni 'locative' (ni yo? 'here, there', see Robbins 1958:103, 145).

These reconstructions assume that the length contrast in final vowels of monosyllables is secondary in Proto-Algonquian (at least in pronouns).

1.1. Vowel Length in Algonquian Monosyllables. In some of the Algonquian languages, the reflexes of vowels in monosyllabic words often differ from their reflexes in longer words. For example, although Pa *ge; generally gives Mc e (as in Mc we:n 'who?' from *(a)we:n- 219), it gives Mc o in oit 'that's what she says' from the participle conjunct of PA *oja; 'she says so' A405 [cf. M sic 'what she says']. Better known are the atonic words of Menominee, whose vowels are often short where a long one would be expected etymologically.

Along the same lines, it now appears that the length of final vowels in syntactically independent monosyllabic Proto-Algonic words in noncontrastive; the phonetic length of such vowels was determined chiefly by the presence or absence of stress.

Generally, their reflexes coincide with those of short vowels in Algonquian, and with those of long vowels in Wiyot and Yurok (see #240, 241, 243-246 above), except where some atonic by-forms have been preserved as enclitics (see #251, 253 below).

However, it seems likely that in Algonquian final vowels of [stressed] demonstratives were further lengthened to indicate great distance (as is still done among the Kickapoo and Micmac). A lengthened vowel is a natural iconic representation for length of time, and for a great distance, and such representation is probably found in all languages. [It's done with the vowel of English far, for example.]

In Algonquian, this practice gave rise to a contrast of length in the final inflectional vowels of demonstratives, the longer vowels marking a REMOTE category of inflection. This category then evolved into the INACCESSIBLE (=ABSENTATIVE) (see #240, 241, 243). Similarly, the contrast in locatives specifying time gave rise to a DURATIVE category, also marked by the longer vowel (see #244, 245).

The shift of Proto-Algonic *j to Pa *q in first syllables, well established in longer words, does not on available evidence take place when that *j is word final. Thus, for example, we will
reconstruct PA *tì 'hypothetical future' (see sec. 6 below).

In contrast to pronouns and other syntactically independent words, PA preverbs (and no doubt pronouns) of the shape CV generally have the reflexes expected in word medial position. However, like their syntactically independent counterparts, these microwords are also exempt from the lowering of Proto-Algic *tì. Instead, this vowel is lengthened in accord with the regular complementary distribution of Pre-PA *tì and *i (i.e., the former in the first syllable of a microword, the latter elsewhere). See #247–250 below.

The analysis of PA vowel length as secondary to Proto-Algic words of the shape CV requires revision of #43 and #44:

(247) *tì 'future of volition': PA *wit (see #4), W vi.

(248) *tha, *the 'future of obligation': PA *kan [changed *keni] 'shall, ought to' (see #43), W khé 'night', Y ke in Y kesi 'future time with anaphoric reference to past event' (beside kesi 'past time, with similar anaphoric reference to that of keis', see Rohria 1956:101).

Y ki 'can, must, will, ought to' is now seen to be unrelated to this preceding item. Instead, it originates in an 'ability' preverb and its use to mark the future is secondary:

(249) *ki 'can, able to': PA *kit [C ki-], Y ki 'can, must, will, ought to', cf. PA *kit:iti (PA kit(i)). Examples are: wC swc kii-tenkenew 'they can't work', ko-ki-ilimea na 'are you (physically) able to dance?' (Voorhis 1984a:39-1), PA kisihtum 'she can make it; she made it'.

(250) *ki 'previous action': PA *kii(h) 'preverb: past' A878 [changed *kii], W kii 'finished' [with ý already, finally] incorporated, cf. PA *kit:i 'completed' A945. PA h may be secondary in this item, having spread from those positions where it is automatic by external sandhi. See also *kit:- 'finish' (?). Examples are: swc kii-kiweiw 'she went home', W kii:ip 'it's cooked' (Teeter 1964:83).

1.2. Gender. Proto-Algic had 3 degrees of animacy in its demonstrative pronouns: PERSONAL (with inflectional *-n), NONPERSONAL (with inflectional *-g), and INANIMATE (with inflectional *-i). It is possible that these degrees of animacy did not form a closed system of gender: rather, entities may have been assigned to a category partly on the basis of immutable characteristics and partly on the basis of transient evaluations (as in Yidin, see Comrie 1991:100-190). There seems to be a continuation of such a state of affairs to some degree in Yurak,
where someone dead drunk may be classed as nonpersonal rather than personal (Robins 1980:361). [See #240, 241, 243 for the personal-nonpersonal contrast. The inanimate category is indirectly supported by #246, as well as its use in Algonquian.]

As the phonological evolution of Algonquian erases the length contrasts in closed vowels (see Proulx 1984:193), there remains no way to express the accessible-inaccessible contrast for inanimate referents (*-i and -*ii come into complementary distribution, with the latter in first syllables of words) - and nonpersonal -*g: is pressed into service for inaccessible inanimates.

This may have happened as follows. First, Algonquian nouns have come to be inflected for animacy (through concord with demonstratives), and most nouns - being longer than one syllable - have only -*i to mark the inanimate. Now suppose that fish and animals are considered nonpersonal while alive, but become inanimate when killed. There is inflectional machinery to distinguish, say, a living fish one sees (accessible -*e) from one hidden on the bottom (inaccessible -*g:) - but none to distinguish the dead fish that has been stolen (inaccessible) from the one that one is cleaning (accessible). Both would take *-i.

In the second case, if a speaker wishes to emphasize the loss (inaccessibility) of the fish more than its degree of animacy, it could be done by innovating the use of nonpersonal inaccessible -*e: here. Moreover, such situations would be quite common and would be likely to lead to syncretism in the inaccessible endings of the nonpersonal and inanimate categories in nouns, from whence it evidently spread to pronouns.

Perhaps this extended syncretism and leveling contributed to the eventual demise of the nonpersonal category in Algonquian. The main reason for its demise, however, is that personal gender evolves into animate in Algonquian (with inflectional -*a and inaccessible -*e:), absorbing much of the old nonpersonal [notably animals and some trees and personal possessions]. What then remains of the nonpersonal is put together with the inanimate. The PA system which emerges is thus:

*-e: 'restricted'

*-a: 'animate', -*ii: 'animate inaccessible,'

*-i: 'inanimate' -*g: 'inanimate inaccessible'

Algonquian evidence suggests that -*e marked a restricted location, overriding gender distinctions (see Proulx 1988:secs.2.4, 3). Consistent with this, Yurok drops it, while
Wiyot - which eliminates the gender inflection along with gender - retains it. \([\text{Wiyot retains } *_{-a} \text{ and } *_{-i} \text{ in nongender uses.}]\)

We shall take up other uses of these endings below (sec.11).

2. Discourse Deictica

Discourse pronouns are somewhat harder to reconstruct than demonstratives, and we must depend on analogy and an appeal to universal tendencies.

Greenberg (1978:61, 70, 73) has established a universal tendency for articles to develop out of 'discourse deictics' and ultimately demonstrative pronouns, and in turn become markers of gender and/or nominal status as they become incorporated into nouns. He further states (ibid. p.73) that 'Subjects, as favorite topics, tend to be definite' - suggesting a possible role for former articles as topic markers. This gives the following evolutionary sequence:

DEMENSTRATIVE \(\rightarrow\) DISCOURSE DEICTIC \(\rightarrow\) ARTICLE \(\rightarrow\)

\([\text{GENDER / NOMINATIVITY / SUBJECT / TOPIC MARKER}]\)

Any of the end products [GENDER / NOMINATIVITY / SUBJECT / TOPIC MARKER] in a daughter language will here be taken as indirect evidence for a discourse pronoun in its protolanguage, provided at least one other daughter language provides direct evidence.\(^2\) Clitics generally mark phrases, and may not have a particular grammatical association with the word which hosts them phonologically (see Kilavaz 1985:104-105). Hence, there is nothing unexpected about finding one now 'leaning to the left' (i.e., or the prior word), now to the right. Reconstructions are:

\((251)\) *\(k\)- (usually restricted *\(ko\), sometimes emphatic *\(ka\) 'the one previously mentioned'; PA *\(k\)-ko (swC gikote: 'there [at a place previously mentioned]' [Voorhis 1984a:37-44] - with prefixed C ej from *\(je\) [see \#257 below], and locative C -tej, e.g., oia: 'hither, here'), W ku 'that', Y ku 'that, the' [used to modify a noun] and, as relative-interrogative, 'when'. W ka 'that (emphatic)' and kaa 'then, at that time', Moose Cree kaksi: 'so that's it!'. Compare PA *\(k\)- [and *\(k\)-?] 'elicitic #1' [Proulx 1988:323], Y -\(k\), often postposed to Algonkian demonstratives.

Other examples of PA *\(k\)-ko are: swC zikosi na ki:-l-tew 'did she say that to her [i.e., 'speak thus to her']?' (Voorhis 1984a:45-3), swC zikosi ka:-ki:-l\(-\)nipahak 'that's how I killed
her' (ibid., p.72-1); C eIwako and eIwako 'the selfsame (both genders)', eikosi niki-s-sicimo nIw eIwako 'Now I have finished telling this one' [Wolfort 1973:37], eikwah tainihi sii-miyiNaniyikih wiikahah, eikotos pasamahiyi eIwakwah tawasi'ma 'Then by the best stores of meat, there his children cleared away the snow.' [ibid., p.34], and abessative eIwakwah 'there she is', eIwakwah warwaike:seiw 'there goes that elk' [ibid., pp.34-35].

The origin of the wa and ya in these longer forms (C eIwako, eIwako) is not known; perhaps it reflects the incorporation of old demonstratives ['this or that selfsame one'] between **ya and **ko. Such co-occurrence of this pronoun with demonstratives is common, though currently the latter are postposed (see Wolfort 1973:37). Generally speaking, demonstratives can freely precede as well as follow their heads in Cree (ibid., p.33), and it is well known in the history of other languages for demonstratives to be incorporated in one position (before or after) and subsequently optionally added in the other (Greenberg 1978:74; 76).]

The C kw of eIwako does not appear to reflect Pre-C **kw and **ki (and thus the stem is not eIwako— pace Wolfort 1973:37), since final **kw and **ki give C kw, as in C anak 'beaver' from *sanekwak 129, and C mistik 'stick' from *amitekwak 1123. Hence the rarer abessative forms in kw (e.g., C eIwakwah) are taken to be secondary, and may have developed as follows:

There are only three Cree pronouns with abessative endings (Wolfort 1973:34-35) and 'the pronouns of this type are not common in texts; only the tainiwa paradigm is fully exemplified in recently collected texts.' Specifically, he cites only singulars for giwakw- and an animate singular pariw: 'that no longer here' beside a full paradigm for tainiwa: where is...?'. Moreover, this last is derived from taini(0)- 'which?', suggesting that the w in tainiwa 'where is...?' can be interpreted as part of the inflection.

Now, eIwakwaw(0/1) is closely associated with taini(0) — not only paradigmatically, but syntactically as well: 'taini is typically counted-balanced by the delimiting demonstrative eIwako' (ibid., page 34). [See the examples above with these words boldfaced.] This being the case, it seems likely that the higher frequency pronoun should serve as an analogical model for the rarer one: i is to tainiwa: as eIwako is to taini, yielding analogical giwakwaw: I know of no overt noun plus **kw plus vowel sequences in PA — unless the common contraction of the *w of verb finals before inflectional *-w is old — and so it seems reasonable to suppose that *o dropped in this environment giving the attested forms.
*ko 'the one previously mentioned (restricted)' is not to be confused with *kwa, another discourse marker. This latter is evidently a conjunction rather than a pronoun or origin [and residual function]:

(252) *kwa, *kwe 'foreground': PA *kwa (C ei*kwa 'and then', Moose Cree eiko 'foreground') [James 1986], Y kweel 'and then' (background, subplot) [Proulx 1980:n.27]. See #257 below for prefixed C ei:- from *šg. Yurok incorporates the (distal) associative deictic (sec.3 below), which shifts the meaning to 'background'. Y kweni is thus for action what obivation is for participants: a mark of 'otherness'.

The other pronominal discourse marker is:

(253) *t- (usually *ta or *tį) 'the one (known but not previously mentioned'): PA *ti 'nominalizing postclitic' (Proulx 1988:324), W ?a 'the, some', čawa and čtį 'that's where, what, why, etc.'. Compare ub tą which topicalizes a preceding nominal, and Sauteaux tąq̓̔ whose function is less clear. Perhaps B -q̓̔t̓- 'the one in X location' belongs here too. The B -q̓̔ would make the form restricted, and B -ą a locative ending. Compare also topological Y tít 'and then', used to begin a paragraph that moves the main action of a story forward (Proulx 1980:297 n.27), and what seems to be its emphatic counterpart to? (ibid. n.38). Finally, compare Y -t in nonpersonal wi? 'this or that' [beside weed]. If C -tec- 't(he)ther' and C -taw- 't(her)es' is related, it suggests a locative origin for this discourse pronoun.

Examples are: Ah ĺęm̓̓ 'this one (inanimate)' beside tą 'this (inanimate)', B apóta and apótaš 'the one [animate, inanimate] above' (from root *əpə- 'high' A357), W wi t̓ə-phia? 'this thumb', k̓išik̓ tə-kšik 'the whale tradition' [Lit. 'while the tradition']; ub t̓əšit̓ə 'it was a bear' [g̓əsš̓ə 'bear'], Sauteaux kiin t̓ə̪ą 'how about you?'; Y to? wi? kəmwey? kətaq̓̔məq̓̔? 'Never have I seen such rough water!' [with emphatic w]. Cree examples are: ota 'here', tanita 'where?', tanitec 'whither'.

We have seen that the development of an article or quasi-article of this sort into a sign of nominality or topic is a natural one. Indeed, there is some sign of history repeating itself: the distal locative na is probably the ultimate source for the Wyot nominalizing particle na 'the one who ... a while ago' (Teeter 1964:66), and ub na 'topic' (Goddard 1983:356-357). [See sec.6 for a discussion of why a distal locative would be likely to develop into a marker of past tense in Wyot.]

Examples are: W na tə-bi-wiłtə̱ 'the one who was swimming before', ub nən̓̓ atn̓̓ta-petliwm̓̓ 'that's where we waited for her' [with ni? 'that (inanimate)'] and mana st̓i-wiłlitəq̓̔ 'she is
the one that made it or them' [with mē 'that (animate)']. Compare
Mā (*elinkip) mē 'that's what I told her'.

3. **Associative Deixis**

Proto-Algonquian has a deictic root *di- (and by-form *di-) which in its COMPARATIVE FUNCTION indicates a similarity between the action or entity referred to, on the one hand, and some (verbal or nonverbal) antecedent on the other ['like this or that']. In this it contrasts with a discourse deictic, which signals that an entity is identical with its antecedent.

This root also functions as a TEMPORAL LOCATIVE and SPACIAL ADLOCATIVE, in which case its reference is distal rather than proximal ('then, thither').

In the Algonquian literature, it is called a relative root, and it is most often glossed 'thus, no, thither' - less frequently 'that kind, (this or that) way, then, there'. It is commonly used (1) as an initial verbal root, (2) as a verbal root following *t- 'be' A2002, (3) as a preverb and pronoun (with terminal *-i), and (4) as an enclitic particle following interrogative and demonstrative pronouns (with terminal *-i).

Each PA usage has matchings in Wiyot and/or Yurok, matchings that call into question the initial and intervocalic Wiyot and Yurok reflexes of Proto-Algic *r as hitherto reconstructed (i.e., W 'y and Y ə).

3.1. The Reflexes of Proto-Algic *r and *l. In order to fully reconstruct the associative deictic of Proto-Algic, it is necessary to abandon the idea that *l and *r are preserved unchanged before vowels in Wiyot and Yurok (other than by shifts in consonant grade). Instead, we must recognize the following correspondences:

<table>
<thead>
<tr>
<th>PA</th>
<th>W</th>
<th>Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>*l</td>
<td>#1</td>
<td>1(r)</td>
</tr>
<tr>
<td>*r</td>
<td>*θ(l-)</td>
<td>*θ(s)</td>
</tr>
</tbody>
</table>

By this account, Proto-Algic *r continues to give Pre-PA *θ (with a regular secondary alternation of Pre-PA *θ to #1 before morpheme boundaries), but before vowels it also gives Wiyot # (or θ - the two alternate synchronically), and Y θ - the reflexes already identified in consonant clusters (see Proulx 1986a:195).
Before vowels, Proto-Alnic #1 continues to give PA #1 and W #1, but it gives Y # rather than #1 (see Proulx 1984a:195 for its reflexes in consonant clusters). The I/r alternations in the Itiwak Sprachbund are now seen to be secondary from #1 alone.

This interpretation of the data is a superior one in that it not only provides for the associative deictic (as we shall see below), but as well for Y basek? 'I think' beside medial PA *-cil 'think' A255 [reconstructed with a final link vowel *-l] - all the while continuing to provide for all previously recognized cognate sets. This item reconstructs as follows:

(254) *gil-, *hir-, deverbal medial *gil- 'think, feel': W haab-'feel so' (Teeter 1964:111), Y haan- 'think', PA *gilem- 'by thought, think (TA final)'. PA and Viotl add the concrete final *-yl by feeling, thought, etc.', (Algic #81)). The pattern in the initial vowel may originally have been like that of *make, do': *g1 (or *l) in initial position (*hak- or *bak- #103, 157), and *yr (or *y) in the medial (*bak- #136, 157). If so, the Yuruk initial is presumably analogical to the medial.

Examples: W kuc ka-bi lahli 'she did not feel good concerning that' (Teeter 1964:111), Y basek? 'I think', N/O mazhendam 'she feels badly' and inendam 'she thinks so' (adding TI *-tam- 'by thought, thinking' (and assimilating the stem final #n to the following #1). Mc annu 'srmek 'she feels bad about it', annu 'lilk 'she feels bad about her', tel 'telesemk 'she thinks about her' (DeBlasio-Metallic 1984).4

This account of #r and #1 does require a number of corrections in established reconstructions - mostly of #1 for #r and the like - but this does not involve any loss of economy, simplicity, or persuasiveness. Corrections are:

Algic #3: Y wurek 'roe of one fish' is surely the cognate here, wurek 'roe of several fish' a secondary (augmentative) grade variant. Algic #55, 56, 70, 71, 72, 85, 115, 116, 124: no br-form with #r is required for Yuruk. Algic #113: the first variant should be *welewe#1. with #1 rather than #r. Algic #148, 185: as #1 variant is required for Y #r. Algic #157, 176: Y #l is secondary. Algic #173: Y r is regular from #1. Algic #223: we need *entel- beside *antar- 'be there' - or rather *tel- beside *tar- (see sec.10 below).

These are all very minor details, and on balance do not complicate our analysis. In addition, there is one cognate set for which a complex explanation can be avoided: Y wek and PA *wily 'navel' are simply from *wary 'and infixed *wegeleyi (see Algic #110).
3.2. Associative Deixis in Proto-Algic. With this new analysis, we are in a position to reconstruct the associative deictic of Proto-Algic:

(255) *2er-, *2ar-, rarely *gal- and *gal- [generally with *a- or *-a] 'thither, thus, that way, like that, that sort'; PA *əqəl-, PA *əqî- (with loss of *i before a vowel and archaically before a stop [Bloomefield 1946:sec.17, 25], and mutation of *ə to *ə before a morpheme boundary unless *(i) or *(g) follows); W *la- (in the preverb təla- 'there, then, thus' - with *t 'be' [see sec.10 below]); Y *son- [extended with perhaps the abstract final *-və (Algic *θəθ), or perhaps with *θ- as in the Wiyot demonstrative nouns wild and kōd], *sin-, and *so(y)- [with obscure extensions and/or lengthening]. See (c-d) below for more variants. Its four main uses reconstruct as follows:

(a) As initial verbal root: PA *əqəl-, PA *əqî-, Y *son-, *sin-, and *so(y)-. Examples: PA *əqəpəvə 'she looks thither or thus' A377, *əqəpəpəvə 'she looks at her am' A35, *əqəənkənəvə 'she has her as (that kind of) relative' A374, M šqipəvə 'she comes to a place' [initial *-qə-]. Y soninepek 'how I feel', kus skı̂nəkəvə 'how hard or which way is the wind blowing?' (with vowel harmony), sothok 'I go so'.

(b) Following *t- 'be': PA *əqî-, W *la- (in the preverb təla- 'there, then, thus'). Examples: PA *əqəəqəvənətə 'where thou art active, where thou dwellest' A265 [*təla- 'there (relative root)'] A2022, cf. *t- 'exist (root)' A2002, W təla-taw 'she dwells there'. See Pronik 1985 nos. 221-224, and note that Wiyot requires a grade variant in *l to be reconstructed for Proto-Algic [*təl- or *lel- beside *tar-].

(c) As an independent or preposed particle: PA *əqî- 'thus, thither' A337 (preverb and pronoun), məli apərən 'in the water' (mutation leveled out, O'Meara, p.c.), M aqel 'that kind or sort', Y heqə 'toward' (e.g., heqə pur 'toward the north'); M am 'there, in place' (e.g., kum am əqəəv 'she isn't there, she isn't in'), Bqə tiš(i)l 'there', zhonda 'here' [Ontwane], Y so 'to a place' (e.g., so rekəw 'to Requa'), and Y no 'thus, so' (e.g., no tekəkə 'she is so stingy') and Y soq 'that sort' [with obscure extensions and/or lengthening]. Compare postponed Y so 'in a particular direction' (e.g., pəvatə no 'into the water'.

(d) As a postponed particle or clitic: PA *əqî, Y *-ə, W *-ə. Examples: PA *tənəli qəli 'how?'; K tənəli inə, M tənəli, C tənəli, Ch -tənəne-. M tovə 'here' (to: 'this [inan.]); C tənəli 'this
way' (quina 'this' (inan.)); N wi:na:ip 'what sort?' [from *we:nxiw-
'what'? A2158 plus *a]. Compare Y yu:is 'thither' beside ya?
'there', Y kum 'where' (e.g., where?, when?, how?) beside ku-
'that', and corresponding W kani 'at that time' (beside ka 'that').

Algonquian seems to have preserved the grade 2-3 (á) form of
this element in nearly all cases, replacing PA *á with *â where
required before morpheme boundaries — although the merger of *á
and *â in most languages would make it hard to find evidence of
grade 1 á.

One term does seem to continue the grade 1 variant: PA
*elekhkwá 'so much' (F inmekikwi, C iyihkoh, M enekoh, cf. M
en-kikokwát 'it's so big around', pgO inikokkwat 'be a certain
size'). For segmentation, compare Mc telikí 'it's such a size'
and apskikí 'it's of a small size' (presumably reflecting root
plus *-skikwate) with the usual haplogly. PA *æl—'thus, so'
is probably rather isolated and obscure in this word, and two
cases are recorded where daughter languages reinforce it by
prefixing productive *æ- of the same meaning: F inmekikwawí
'it's so big', and M enenekoh 'so much'.

Another reconstruction seems to show PA *æl-, in a rather
specialized semantic function (which may account for the rarity
grade 1 in the less specialized uses of this element). It is
added after higher numbers with roughly the meaning 'that many':

(256) *æl-, *æl- 'be such a number (over á)'; PA *æli (M
enæ postposition 'number over a decade', e.g., metatsiham nui
enæh '15'); W (h)ák-, e.g., wâ:næg hákæd 'they are 3' (Cf. káčkæd
'it's one'). Wiyot shows the old pattern for a quinary unimodal
system, while Memonenee has shifted to decimal. Wiyot preserves
the archaic pattern too in permitting classifiers after this root: W
tëskiklak áâk '6 fish (or elongated objects)’ (beside dëskhák '3
fish' — Teeter 1964:36, 39), W wâ:næg, tæ-tæ-bowl-bi-sikwâ:n 'one
dries them 5 days' (tæ-tæ-bowl-bi-sikwâ:n 'one is drying three 3
days'). The last example shows deletion of the initial short
vowel after a preverb ending in a vowel — and an unexplained
glottal catch.6

Another specialized function of the associative deictic is
found in Memonenee, where a reduplication of it serves as a
pronominal meaning 'like me': M ciseg-ænæsæw 'like a man'. Parallel
formations involving ordinary distal demonstratives — proposed in
Algonquian, postposed in Wiyot — are W ya (e.g., wè:sik 'like
dogs'), B amn (Taylor 1969:157) (e.g., amn otsekikáxwikis 'like
snowbirds' [Uhlenbeck, under AMk], and perhaps Pa ansa
(e.g., ansa wëshinæw 'like her father'). This last could be a
compound of the ordinary plus associative deictics.
Now, in my earlier reconstruction of the Algic obviative suffix (and in many other items) glottal catch as the first member of a cluster is attested only by the Wiyot cognate, and is in the proper position to be the result of laryngealization [the final vowel of the obviative suffix has dropped in Wiyot]. Therefore, I am now persuaded that the glottal stop in the Wiyot obviative suffix is a separate morpheme from the one marking obviation (at least in origin).

It is also clear from the Algonquian evidence that the final *-i of the obviative suffix is an inflectional element - replaced by *-oi in the assimilative endings (e.g., K -oomi 'obviative sg.'). Thus, the proper reconstruction is:

(257) *-Vi, *-Ye 'obviative', PA *-Yi and inaccessible
*-Vi(e), *-Ye and *-Y(e). This replaces item (30).

The underlying identity between the unmarked Proto-Algic associative deltic *Yr and *Yl, on the one hand, and the obviative suffix, on the other, is now obvious. Proto-Algic evidently derived the latter from the former.

In the case of Algic, at least, it is not altogether surprising that this might happen. While most deltic elements make anaphoric reference to a previously mentioned or known entity which is THE SAME as the one being specified, the associative one refers to ANOTHER entity to which the present one (or its location) is being compared ['like that' versus 'that', 'to there' versus 'there']. Association generally implies similarity, but also nonidentity.

This nonidentity may have been with respect to the primary referent of a discourse often enough to lead to its implication (and later specification) of secondary reference. This would have led to its use as a discourse marker (see Goddard 1984), and its syntactic uses would have followed as the result of grammaticalization - especially in redundant environments.

If this is in fact what took place, we may ask how far this had progressed by Proto-Algic times. For example, Yurok lacks what might seem to be one of the main features of obviation, grammaticalization in possessed nouns. Instead, Yurok obviation is largely limited to deltic phrases in sentences whose main verb has a third person subject, and to a verb of being or having (with deltic origins, as we shall see in sec. 10 below).

The exceptions are its use in the adverb voy(e) 'strangely' (or unknown origin), and in emphatic wi(e) in some cases where it does not follow a personal pronoun originating as a demonstrative. The later cases are perhaps secondary to those
cases where it IS part of an old emphatic demonstrative phrase, and it's conceivable that 'strangely' originates in an adverb referring to non-Yurok locations (i.e., 'strange' = 'foreign').

Common cases of Yurok obviation involve its optional use in deictic adverbs: wonew(s) 'above', skeli(s) 'down', pow(s) 'away', and several others. Examples are: skeli(s) to♂oolinesè 'they lay down there', and the compound wonew-waxk moon (passes iteratively above)! - where it is obligatory. Common also are emphatic personal pronominal phrases, e.g., yoʔkoh wia 'it is they (who)...' [compare nonobviative wia(?) 'emphatic']! It seems rarer in locative nouns: yonoh kic Yoʔk 'she sat in the boat' [yonoh 'in the boat']. Finally, it is found in the irregular third person forms of ʔ- 'be', exist, have': tokw 'there is', ʔokw 'there was' 'he has a wife' (and its negative counterpart mok'wa).

The close association of obviation and deixis in Yurok surely must reflect the state of affairs in Proto-Algic. The use of obviation in possessed nouns, as in Algonquian and Wiyot, must arise later as deictic verbs of 'being somewhere' come to mean 'exist' and thence 'have' (see sec. 10). This leads to possession joining deixis as an obviative category in these later two languages.

Such a development is natural enough to have been innovated independently in the two cases, but it could also have resulted from a period of common evolution of the two languages after Yurok split off from the parent stock. It can thus be added as a further tenuous bit of evidence for such a grouping within Algic, along with even more tenuous lexicostatistical evidence (see Proulx 1982:191).

It remains to explain why, if they have a common origin, associative deixis is word initial and obviation word final in Algic. Assuming as we do that they originate in a Pre-Proto-Algic deictic pronoun which evolves into an atomic function word and clitics, one of two possibilities seems likely: it was placed before the last word or after the first word of a sentence [respectively clitic types 5 or 6, and 3 or 4 - see Klavans 1985:table].

Since there is plenty of evidence for clitics and particles in second position in Algic sentences, and none I know of for penultimate position, second position seems more likely for this element as well. However, if usage evolved in short sentences consisting of an adverbial or a nominal plus a verb, the two positions would coincide in any case. [The evolution of usage in short sentences seems reasonable: shorter and simpler forms tend to be analogical models for longer and more complex, as in the case of noun singulars being models for new plurals and the
As it criticized, the old pronoun tended to 'laman left' in accord with the suffixing nature of Algic - and thus be enclitic to a deictic adverb or demonstrative phrase or the like which preceded the verb. Once this clitic had become incorporated as an inflectional suffix, its position was fixed and it 'traveled' with its host - i.e., other words could intervene between it and the verb. For example, see Yurok 'she sat in the boat' above.

However, in sentences consisting of a single verb, the old pronoun could only become proclitic to it (or change position). In such cases, moreover, it could only refer to the action of the verb ('she sat thus' or 'she went thither') - whereas in the longer sentences it would usually refer redundantly to locations ('she sat there') and gradually to assume its obviative functions. Here too, as the proclitic became incorporated into its host, it began to 'travel' with it. The split in positioning and meaning was achieved.

The foregoing suggests that verbs typically followed adverbs and nominal phrases in Pre-Proto-Algic sentences with the associative deictic.

5. Directional Preverbs

Some directional preverbs or roots seem to originate in deictic pronouns. The associative deictic of Proto-Algic has an adlocative use ['thither'] as we have seen, and in some of the Algonquian languages ordinary distal deictics assume this function: Pa sat- 'go there co', RhO ni- 'go away' [from *no, *mi], and Ch la- 'away from speaker' [from *pe] - beside conservative sW IC it- (changed out-) 'thither'. See Prodlux (1988:319, 324) for the final Pa i. Compare PA *alem- 'off you way' and *aipen- 'off and away,' which seem to have the associative deictic as their first syllable.

Examples are: Pa načipu 'she goes there to eat' (Leavitt 1985:74), RhO ni-giwe 'go home', Ch a-ta-h66e 'she went home' (Leman 1984:136), and sW C taničet ahtichiyan 'where are you going?' (Voorhiss 1984:201). The PA reconstructions are: *načipu 'she takes her away with her'; F avanow, C avawaw, M awamāw; *awatowaw 'she takes it away with her'; F awatowaw, C awawaw, M awawaw; *ake- 'off you way'; F anem-, C akəm-, M aŋwem-, Mc el- (changed); and *aipenV 'off and away'; C apem, M ahjip
Compare Y hegi and W dáki 'toward' [perhaps respectively from associative *eri and distal *na plus enclitic k from #251], e.g., W dáki, bə?r and Y hegi pur 'toward the north'.

Proto-Algic also has:

(258) *wən, *wə 'go and do'; W ha 'go to' (ha ləpihi 'she goes to pick it'), Y ne 'went and did' (ne teegq? 'I went hunting'). Compare F awi- 'go and, go to' (awii:panepya 'she goes to see her')—evidently combining this particle with PA *aw- 'go do' (NI0 aw- 'go over to' [800 ngi-{i-shaa 'I'm going to bed'], N awish 'go off to perform action'); and compare the PA root *aw- in *awii- 'TA: take away', *awat- 'TA: take away', and in C awi: 'get away!' and awite: 'so there you are!'. Compare also W ák 'postposed particle: all the way to, beyond' (Teeter 1964:96), and C awái-, awisite: 'beyond' and awisamei 'further, beyond'. This reconstruction replaces #227 [awii-].

Unexpectedly, the Proto-Algic and PA elements reconstructed in #258 resemble the two PROXIMAL demonstratives *n- and *n-.

Motion 'from somewhere', i.e., toward the speaker, is signaled by PA *wenti- 'come from' A2183 [*wenti- A2189], based on the AI verb *wenti-'Come' plus the common extension with TT *-(V)h (see Bloomfield 1946:sec.103). C gii- 'from there' evidently preserves the shorter form, with truncation of the *w, Cheyenne has ngeh- 'toward the speaker', evidently from *ni after the latter has shifted to proximal in that language. Compare W wik, Y mek 'from', which look like proximal demonstratives plus locatives.

Examples are: swC taînite: nhtobeteyan 'where are you coming from?' (Voorhis 1984a:20-2), Ch ə-mex-æntitchedane 'she came home' (Leeman 1984:336), W wik, bə?r 'from the north', Y ceha:an nēkwecok? mek kohpex 'yesterday I came back from Crescent City'. Teeter (1964:96-97) states that both W dáki 'toward' and wik 'from' may on occasion be translated as 'in the direction of'.

5. Temporal Preverbs

Algic has several temporal preverbs derived from deictic pronouns. In Ojibwa, where demonstrative *ni has not become proximal as it has in Cheyenne, there is a preverb ENO gi- 'in the future; go and do'. Woods Cree has a first person future preverb ma- (Greensmith 1985:68-69), e.g., namatān i will place her' [námatai 'as she places her']. These elements suggest that the future is a place one is moving toward.
The other side of the same coin is seen in SwC ohcî from PA *wel- 'come hither from somewhere', which in addition to its inherited function is used to mark the past tense in negated verbs (replacing ki- of affirmative ones): SwC wâcc ohcî-kîwew 'she didn't go home' beside ki-kîwev 'she went home' and SwC wâcc ohcî-kîwev 'she doesn't want to go home, won't go home' (Voorsius 1984a:11-1). Here the past is metaphorically a location one comes from.

These usages exemplify what Fillmore (1971:28-28) calls 'the moving world metaphor' for time, in which we and the material world are seen as moving forward in it - an idea already perfectly familiar to European culture. Indeed, the future tense in English employs the verb 'going to' as auxiliary, and French and Spanish have parallel formations. Closely related to this is the Algonquian use of *wel- for cause, which are seen as prior to their effects in time: wô werkëni onci, Algonquin Sêkonek Wendêki, Mn. ganeuk watschi, Mc. kooxowew wëti, Mî kâkeuandî, K wentîneki onci, N kołi watschi, L. ten naj 'why?'.

There is another way of looking at our changing position in the temporal dimension, which Fillmore calls 'the moving time metaphor', where for example 'tomorrow is coming'. The Iroquoian languages tend to prefer this way of viewing time in which the future - the time yet to come - is seen as the rear part of the temporal dimension, much as the back part of a passing train is the part yet to come.

This explains, for example, the meanings of Mohawk onâkî 'behind, later' in contrast with PA *wetswankei 'before, behind, earlier' (Froox 1980a:290) and PA nîstânì 'in front, ahead, in the future' (F niâkâni, rhô nîgnan, C nî:kan, Pe nhkvennì [Voorsius 1979:72]). It also accounts for the development of the distal prefix y- into a marker of the past tense in that language (Boavillain 1981:62), and the use of the proximal prefix to signal the future in Oneida and Cherokee (Abbott 1981:56-57). Contrast this with the opposite developments we have just reviewed in Algonquian, where distal implies future, and proximal past.

Yanark is like Iroquoian rather than Algonquian in this respect; it favors the moving time metaphor. Thus, it has poyew 'before, in front' and hinory 'after, behind'. The situation is less clear in Wirot, but if the first syllable of W chîwan 'afterwards' is related to the last in W wiwihi 'behind' - as the respective syllables in W kisi 'right now' and wîki 'now' presumably are - this language may also be of the Iroquoian type.

W mi 'soon' [presumably from the old proximal pronoun] also, if it is an innovation, links the proximal with the future (see #247 above) - and thus points in the same direction. So does the Wirot nominalizing particle na 'the one who ... a while ago' (Teeter
1964:66) - evidently from the distal demonstrative *na - which links the distal with the past. [There is also W ku walkɪw 'that (next) morning', where temporal location relative to the present isn't clear.]

Three temporal preverbs are reconstructed for Proto-Algonic:

*mi 'assured or volitional future' #247, *kti 'previous action' #250, and *ska, *ska 'future of possibility, obligation, or appropriateness' #248. The first could plausibly be related to PA

*kwì- 'go do' [discussed in sec.5 above], and ultimately reflect the proximal demonstrative *kwì (see Proulx 1988:sec.2.2 for initial PA *g)]. In any case, *kwì is surely the source for M nw 'preverb: shall, will' - although the M nw in the prefixed form [e.g., nenax] is unexplained. [In Cree and Ojibwa 'will' takes on a secondary meaning 'want' - which may then apply to the past as well as the future: RhO niw was-nig'man' go'in 'those who wanted to fight her'.]

PA has two core preverbal particles marking the future of possibility, obligation, or appropriateness: *ta (C ta -, RhO da -), and *mi (C ci-, RhO ji-, Ch btai-; M ceq [-c in prefixed forms, enclitic with demonstratives] Hypothetical, possible, or reported action; Ab -ji [Laurent 1984], Pa -c-, -bo-, -bo], *ta is used where no prefixes are present - except apparently in the plain conjunct of Cree and Ojibwa, where *ta is used, *mi is used generally in the other languages cited. In Abenaki, it occurs in particle-typical second position (on any word); it is a preverb in those languages that prefix it.

Examples are: RhO wda-nuwejandqe jë-ni-giweq 'she wants to go home', poqoj da-wi-nokt 'she has to go to work', ndds-xi-nsaj 'I ought to leave'; Ch tse-anjo 'she'll fall off'; M saceewak 'It must be that one (animate)', saceewak 'It must be this one (animate), Ab *dam-an k 'sawaganepr my dog will bite thee', n'd-as-ii Molian 'I'll be in Montreal', assa-ji m'wajundwi 'I shall not have had' [Laurent 1884:122, paradigm]; Pa kwestyic 'I'll see you', tan ækã jum k'tiilehaken 'what shall we do to her?'; Compare also M cemecatk 'as it would seem', and the bo in M xiskitecawk 'what, I wonder, is it?'.

PA *ta- and *mi 'future of possibility' would appear to reflect the Proto-Algonic discourse pronoun *t- #253, used for known but previously unmentioned entities. PA *ta- 'would, could, must, can' (Eho doq-, Moose Cree tær-) would appear to be a stressed variant of PA *ta-. Compare the second syllables of Y kiti 'future' (kiti to 'move; it's going to be hot') and kiti 'future: going to do' (kiti to 'we're going acorn gathering') - which essentially appear to be there to reinforce the first. *kti 'previous action', on the other hand, surely reflects the other Proto-Algonic discourse pronoun: *k- 'the one
previously mentioned' #251. #wi 'assured or volitional future' reflects proximal #\text{-}w-.

There is no doubt that #\text{-}w- is proximal, and it seems reasonable to view #\text{-}k- as distal: it specifies a reference made at another time (not the present). Wiyot and Yurok ku, for example, are glossed 'that'. The position of discourse #\text{-}k- on the proximal-distal scale is less obvious. However, in my view it can be considered proximal since it specifies a reference only being made in the present (and not at another time). Moreover, it seems likely that discourse deictics evolve from old demonstratives (as they do in Cheyenne), and one cannot imagine where a 'first reference earlier' versus 'now' distinction would come from if not from a distal versus proximal one.

All this establishes that Proto-Algic favored the moving time metaphor. Hence, Algonquian languages have two layers of temporal preverbs: ancient ones inherited from Proto-Algic, where distal = past and proximal = future, and the later innovations with the opposite pattern.7

There is a kind of parallel between the findings in this section and those in the previous one on directional preverbs. While it is distal demonstratives that get used to indicate 'motion away' in the various Algonquian innovations - and indeed the associative deictic which serves this function in PA seems to have a distal background - we saw that the reconstructable Proto-Algic preverb #\text{-}ma, #\text{-}na 'go and do' #258 looks like a proximal. So too PA #\text{-}m\text{-}\text{-}ma- 'go do', certainly related to future #\text{-}m\text{-}\text{-}m- and ultimately proximal.

Could the use of proximals for 'going to do' reflect a goal centered reference point as opposed to the speaker centered one we use in English? That is, just as we may take the addressee's point of view and say 'I'm coming over' rather than 'I'm going over' (to someone on the phone), is it not possible that the speaker of Proto-Algic said something equivalent to 'There are lots of berries by the river, and I'm COMING to pick them' (perhaps visualizing the berry patch) where we would say 'I'm GOING to pick them'?

Deixis in the spacial and temporal dimensions is generally quite similar (or identical) in the Algic languages, but if time is viewed as moving toward us, it seems unlikely that space will be similarly visualized. Could not a goal centered reference point for motion in space restore parallel use of preverbs?

There are no answers to these questions within Algic, of course, and hence they lie well beyond the scope of this paper. However, if these speculations are correct, some of the languages
of the world with moving time metaphors will also turn out to have goal centered reference points for verbs of certain kinds of motion.

7. Relative Pronouns

One relative pronoun root is reconstructable for Proto-Algonkian:

(259) *2- 'relative pronoun: when, when, who, what, why'.

(a) Uses of *2a, *2o. PA *ag- (usually changed *e-2-) 'preverb complementizer: where, when, who, what'; *wa *nominalizer, locative of quasi-vowel; *yo *locative, comparative. This pronoun seems to go into the formation of verbal nouns of habitual (durative, iterative) action or state for the most part in Algonquian, and was perhaps nearly always stressed.

Examples are: RHD a-bei-ncoge 'the station' (i.e., 'where it (the train) stops going along'), a-mashigame 'in the west' (i.e., 'where it (heavenly body) sets'), a-so-hah-g 'when it's evening' [with preverb *2- 'when, whenever'] (Taylor 1969:306), C eeh-pintaik 'when she came in' (Wolfeart 1973:46), Moose Cree a-taaw-goike 'in the fall', RHO a-tikonde 'baseball fielder' (i.e., 'the one who is on the lookout'), a-ni-jid 'what she eats', awC eek-e kati-oci-oo-niyam 'because [that's why] I didn't have any money', awC a-ki-nikotsit 'because she was sick' (Younius 1984a:36-1); a a-li-i67yuk 'on my ship', hait-eelzipwily 'what one floats with' (Teeter 1964b:48, 49); Y Yo letli?li 'there is a lake there', Yo oogokak in 'a forest', Yo neki yegah Yo ko-lewo?li ku yilel 'they were just eating when the house fell in', YO a-wa?la Yo ku k6 yok ni hunowoni 'it is different from those that grow here' (Robins 1958:103, 145, 146). See also *243, 246, 262.

The glottal catch in the Blackfoot preverb appears to me to be 'aorphone-final 2' (Taylor 1969:106-108), at least in origin, and similarly the aspiration in C eeh- must have arisen from the actions of assinal sandhi. W lik is also the product of external sandhi (before a root beginning in a y). Compare W hai-eti-kitsit 'on her nails' (Teeter 1964:26, 82).

(b) Uses of *2a, PA *ag- 'there', W ha 'then (immediately after that)' [see Teeter 1964:88], Y *hi 'where, why, then'. Examples are: C ita 'there', iti: 'thither'; *a loi 'over there', M eem and b6 'in' 'there'; M *a? here is, voli! 'agons-la? 'here who fa?'; W ha-ik6ti-li 'then she jumped across' (Teeter 1964:85); Y kus *lit 'thee is where you from', wit *ti nom met wacawew 'that's why it's difficult' (Proulx 1986:297, n.31), tems
hay ki Taakweget tu? yo?kiob ?i nu?n?m 'I tried to visit you but they arrived at the time' (Robins 1958:103).

(c) Uses of *7o. PA *n1 'locative [restricted]' (Moose Cree or 'immediate vicinity' [tsatna q; 'where (right down here)'?]; C otan, M ona, ko ona 'here'; W hu- [hu-tá-la?]laway 'when they dance', ko?wi1, hu-tá-dákw 'persons who die' (Teeter 1964:85, 107)); Y 7u 'locative' (not 'past' pace Robins 1958:96, nagna?an.
notq' wahci tu gek?we 'often he found it far up in the hills',
where the past tense is clear from the context - texts 156 line 9); Compare Y kitkwa tu = kitkwa1 'still', where pla is probably related to locative '_DMA (again not 'past' pace Robins 1958:99);
kitkwa tu ngey wi7?jakon 'it is still mourning to this day', yo?k.
itkwa1 não?n wacwin 'she is still able to talk' (Robins
1958:118, 102).

It is known that glottal catch dropped in initial position and in consonant clusters in Algolian and that glottalized consonants merged with simple), but the very scanty evidence suggests it may have been preserved between vowels (see #218). If so, the relative pronoun may have yielded the PA pronouns locative *gah1 'locative #1' (Froula 1988:322), and the durative one *-mhi: 'adlocative', as in Mt noda hither and maha
'thither'.

8. Personal Pronouns

Algonkian personal pronouns are built from a dependent medial *
*(v)wa' 'self' plus allocative prefixes:

(260) *k7i1(aw)a 'thou': (a) PA *ki1(aw)a A996, W kh1l.
(b) Y ko71, kel--.

(261) *ki7iawa1, *ki7iawaw 'ye': (a) PA *ki7iawa1.
(b) PA *ki7iawa1, Y kel1. Compare W ko7l waw [or ko7l waw].
Replaces #132, where the PA forms are reconstructed.

(262) *wi7i1i, *wi7iri 'she or it': (a) W wi7i1i2. (b) Y
ki7i1, Y kel1. Cf. PA *wil1a A233 or *wilawa (?), lacking the
obligative suffix. Compare also Y ko7l 'something, anything' and
ki:ko7l 'everything', without obviation.

Glottalized *k? evidently given Y k by dissimilation in Y
ke7i1, and simple Y k in the plural may be analogical. It is
uncertain why Y ke7i1 and ko7l have glottalization, but some other
Yukon particles and pronouns do as well - perhaps ultimately from
predicative use (nuo #718).
Final *(wa)* is loco in all of the languages, but is set up for PA singulars on the basis of derived forms (see Haas 1967:141). The 'ye' forms evidently lose *(wa)* by haplogy.

Third person personal pronouns are known to often originate from demonstratives (Greenberber 1978:75), and we have some cases of this in Algic. Clear Lake Ojibwa uses its zero root demonstratives in this way, e.g., jix 'they' = those (animate). Similarly, Virginia yowah *'she'* (beside yowik *'this'* and yowha *'these'*), and Y yot *'she = that one (animate)'*. Compare Y yoticoh *'they'* (with no demonstrative counterpart).

9. Interrogative Pronouns

Generally speaking, Algic languages have four stems for question words: one each to enquire about (1) persons ['who?'], (2) things ['what?'], and (3) circumstances ['wh-? which, where, how?'], etc.; and (4) one for yes-or-no questions. Following particles and sometimes verbal initials generally make further specifications (see Black 1971:148-149 for the details in Ojibwa).

Categories 1 and 2 share the feature of concreteness - the specification of entities. Being so closely related, there is neutralization of the two in some cases. In Cree, for example, nonliving things of animate gender may take either interrogative; if the gender is unknown to the speaker, 'what?' is used (Voorhis 1984a:8-4).

Categories 2 and 3 share the feature 'nonpersonal' ['animate', in Algonquian]. In Cree, again, there is free variation between the two pronouns for forming 'why?' questions: tanigik and kikogin ochi *'why'* (Voorhis 1984a:38-1). This variation probably dates back to PA - compare L ton Bagi and Mi anysh wachki of the same meaning - and seems to be an aspect of a more general rule by which the third interrogative can optionally replace the other two in a clear context [see Black (1971:151) for discussion and Ojibwa examples].

Analogical leveling or reshaping, which not surprisingly is quite common, generally is among words with shared semantic features [1+2, 2+3 - not 1+3 except where 2 is also involved].

For interrogative stems Proto-Algonquian evidently had (1) *wern- *'who?*; A219 [reconstructed with initial *-n-*, (2) *wk- *'what?*; A2138, and, for *wh-*, (3a) *-n*, (3b) *nik-, or most commonly the two together: (3c) *niki-. For a discussion of the unstable initial *-n-* in question, which resembles that of some demonstratives, see Proulx (1988:sec.2.2), 'wh- ' reconstructs as
follows:

PA *wa-n- 'who'; *tai-n- 'which'; (a) S *pi-n-; (b) M *nun-; O *ar-i-n-
(c) F, K, C, M, D *tai-n-, M *tsi-n-, A, Ch *tai-n-. Short forms lacking the *n- are found, notably in several Middle Atlantic and (formerly) adjacent languages: M *m-n-a-ti, N toh(n)-en, L ten, ud *ka, and Montagnais ta esneh 'what?' (Silvy 1978-84:151). Perhaps related as well are M *takatch, and N *takatch 'when?', and Ch *touka, M *tani, and Ps *tami 'where?'. It may also be noteworthy that the languages with stem 3b (*ain-) are just those with zero-root demonstratives [see Provtk 1988 (sec. 4.3)].

In most of the Algonquian languages, the 'wh-' interrogative is also used as a relative pronoun, which may help explain stem 3b. PA *tai-n- may reflect Pre-PA *nai-, composed of Proto-Algon *n- 'relative pronoun' plus analogical *tai- from interrogative *wa-i-. If so, Algonquian has simply lost the contrast between Pre-PA *nai- 'relative pronoun' and *tai- 'wh-'.

The 3 supplementary question stems of Algonquian are rather unstable historically, with a marked tendency for analogical replacement or reshaping to occur within the set along the lines mentioned above. For example:

**PA**

<table>
<thead>
<tr>
<th>Kernow</th>
<th>NWR Montagnais</th>
<th>Blackfoot</th>
</tr>
</thead>
</table>
| *werwa* | wern:sha | [ČerkwJo:n] | [tla- (AN sg.)] 'who?'
| *we:ki* | we:n:li:hi | Čerkw[ain] | [tsi]- (IN sg.) 'what?'
| *t(a)n-* | tain- | tain- | 'WH-?'

Bracketed roots are analogical to an adjacent ones in the same column: 'what?' becomes an inanimate counterpart of 'who?' in Kickapoo; the Montagnais root for 'what?' has been replaced by a borrowed indefinite pronoun, its reflex of *kikw- 'something' (Ps *kikw-), and it has spread to 'who?'; and so forth. Note also that *a-n- has spread from 'WH?' to 'what?' in NWR Montagnais (and in Mont Cree, which has *kerkwain*).

These pronouns most commonly reflect for the singular, but plurals are attested: C *swi:nikii 'who (mn. pl.)?'; and C *kikwaya 'what (mn. pl.)? or what?' [Wolfart 1973:34-35, reflecting a dialect that has *i from *gi]. As these examples show, the inflectional finals pattern as they do for demonstratives: stems ending in nasals require link vowel *i, those in semivowels *a.
9.1. Proto-Altic Interrogatives. Just as some Algonquian languages have analogically replaced some interrogative elements, Miwot and Yurok have leveled parts of the Proto-Altic system. This and several phonological difficulties make the reconstructions which follow tentative:

(263) *tai: - or *tai?- 'WH-?': PA *a(i)-[reconstructed above], W tūnwa (with W -an 'interrogative'). Cf. PA *a(i)- (from relative *a(i)-?). Recall that **k gives PA *n, W 1, and W before a word-final vowel (see items 31, 32), and W regularly loses voice in a consonant cluster (see Proulx 1982:120, 1984:160). Stress is suggested by Mi tain, although the vowel length here could result from the monosyllabic character of the word. The alternate reconstruction with the link vowel and glottalized *h? is suggested by #265-266.

(264) *defiwį̂n 'what?': PA *defiwą̂n- A219, W kwį̂fwa, W -ą̂k is analogical from the previous item, in just the manner of Cree-Montagnais -aun above, and its stress evidently supersedes that of the previous syllable (see Teeter 1964:27). *ą̂k drops initially before a single obstruent in Miwot (as in the set 1b prefixes - see Proulx 1984a:169), leaving only labialization of a following **k (which is already labial in this case). Stress on a vowel causes it to lengthen in PA.

(265) *viţi’n 'who?': PA *viţi’n- A219, W kwį̂fwa [cf. kwį̂fwa 'somebody', kwį̂fwi 'living person' - root kwį̂ - 'be alive' (Teeter 1964:107)]. Y titnów. The Miwot root is analogical to the preceding item, the Yurok one to the next preceding one. The final Y -n may be from the emphatic postposition *ăk #259 - or perhaps it is related to W -an 'interrogative'.

Glottalized nonstops merge with simple in PA and Yurok. As for Yurok *n, there is some irregular (and sometimes optional) synchronic alternation of stem final ą̂ (and ŋ) to a when preglottalized by the third person inflection Y -n lekwoŋ 'she falls' [stem lekwo-, Robins 1958:38]. Evidently then, *ăk regularly gives PA *n, W 1 (ą̂ in clusters), and Y n before a word final vowel. The first and last items apparently contain by-forms of the same second element:

(266) *ći’n - '-----'; *ćiîn- or *ćiî- 'WH-?', *ći’n 'who?' (PA *ćîn- A219, W kwį̂fwa), cf. Y titnów 'who?', and W kwį̂fwa, Y titnów(1bow) 'what?'.

It is clear from the Algonquian evidence (e.g., B *ə̂- 0 a(i)- and analogical C -aun), as well as its analogical spread in Miwot, that *-aun- at least to a separate element. Hence, its
first vowel could be a link vowel. As for *-$\nu$ in #265, the reconstruction is only valid if its first vowel is a link one.

Differing link vowels in otherwise cognate sequences are not unknown: compare link *$\eta$ in PA *-$\eta$-laniyik (reflected in C niteraniy, M neti:vanj:V, O nantetananiy 'my tongue') with link *$i$ in PA *-$i$-laniyik (reflected in most of the other languages, e.g., P alimantik). [The differing form of the prefix is automatic before these vowels.] For Alcige, there are the personal pronouns, and a body-part noun:

(267) *-nv-wjтанi 'neck': PA *-nwo:wanjani (#165), W (by)yaviti:kanj 'her neck', with medial *-yavu (#165). For the loss of *$e$ between a long vowel and obstruent in PA, note the same loss in Ojibwa (Bloomingfield 1957:53) and compare losses of *$u$ in the same environment (Proshek 1964:196).

Differing link vowels thus do seem to be found in otherwise cognate sequences, and there is no reason to doubt that *-$\nu$- is just such a case.

The Proto-Alcige interrogatives thus form the following system:

<table>
<thead>
<tr>
<th>Proto-Alcige</th>
<th>PA</th>
<th>Wiyot</th>
<th>Yurok</th>
</tr>
</thead>
<tbody>
<tr>
<td>*n$\nu$na</td>
<td>we:na</td>
<td>[kw]liwa</td>
<td>tli:now</td>
</tr>
<tr>
<td>*n$\nu$ki</td>
<td>we:ksi</td>
<td>kvâsa</td>
<td>tli:ni(180w)</td>
</tr>
<tr>
<td>*n$\nu$-</td>
<td>*(an)-</td>
<td>tâva</td>
<td>kus</td>
</tr>
</tbody>
</table>

The bracketed roots in Wiyot and Yurok are analogical.

The ultimate source for Y tli:n- is *$\nu$-, which spreads upwards through the Pre-Yurok sets, and *-$\nu$- which spread upwards or downwards. After the leveling was complete, Yurok replaced 'why?' with kus — evidently an interrogative counterpart of Y ku 'cho, that, when' (from *ko: 'the aforementioned' #251 above).

It is obvious that these items have constituent parts: *$\nu$-, homophonous and perhaps identical with the proximal demonstrative (with which it shares the unstable initial PA *$\nu$-); the root *-$\nu$- originating from *$\nu$- 'the one known but previously unmentioned' [#253 above], in much the same manner that Y kus originates from *ko: and *-$\nu$- #266.

If *$\nu$- is in fact a demonstrative, it's function could probably could be reinforced by postposition — Algonquian
10. To Be (Somewhere)

Deictic and interrogative pronouns often are homophonous with the roots of verbs 'to be' - and sometimes 'to have'. In Proto-Indo-European, for example, compare the discourse deictic *sê with *s(e)ã- 'be' (Meillet 1937:326, 199). Such similarities are also found in Algic, with distal PA *s(e)ã-, for example, resembling the root in C swiy 'she's there, she is, she has it', and changed conjunct PA exit 'when she was there, when she had it'.

This is not entirely surprising, since the 'be' verbs typically have 2 or more of the following meanings: (1) 'be [in a certain place]', (2) 'be at home'; (3) 'stay [in a certain place]', (4) 'dwell somewhere', and (3) 'exist [in a certain place]'. All of these meanings signal position, usually anaphorically. As for verbs of 'having', they are related to those of 'being' via the equivalence of sentences such as 'it is hers' and 'she has it'.

Algic languages often have nonverbal predicates, which may be nouns, pronouns or particles, and which (in some languages) take verb-like inflection: W mêtê 'it was wood, there was wood', Algonquin asinïtokan 'c'est peut-être des pierres' (Cuq 1966:40), Nc witapawat 'an 'she was their friend'; Nc mô 'it is that, there, them' (emëh 'that', emëh 'there, then'), Nc ma nekk'mewy 'she or it isn't here' (nek'm 'she'); C aistamitik '(you pl.) come here!' (aistam '(you sg.) come here!').

In all of these constructions, as well as in equational sentences, the idea of 'being' is expressed by a zero root whose inflection (if any) is added to the preceding word. It seems plausible therefore to see in the various verbs 'to be' (a) old locative pronouns used in preverbal position, plus (b) a zero root 'to be', and (c) inflection.

10.1. Yurok. Let us consider, for example, the origins of Yurok ñ- 'be', have, exist, dwell', as in Y tokwə 'she is (there)', Tokwa wahpew 'he has a wife', and kwa ñotəm 'where do you live?'. By the hypothesis just sketched, it must have evolved from the locative particle Y ño - and ultimately its Proto-Algic antecedent, the relative pronoun ñam 'where, when, who, what, why' #261.
10.2. Proto-Albic **-t-. Another verb *to be* with likely origins in a deictic pronoun in Proto-Albic *-t- 'be, exist, dwell' *221, presumably from a locative use of the Pre-Proto-Albic pronoun which becomes discourse *-t- 'the known but previously unmentioned ... [place]'.

This locative origin is seen in the following. First, inflected with *-a-, it forms a verb *tala- 'to exist (somewhere), stay, dwell' *222.

Second, the same locative function is seen in W *-t- 'relative/interrogative of location' (e.g., W *tawa 'where?', *taka 'wherever, whenever', *tal 'that's where'). Compare also Y *too 'there'. This item is perhaps related to *tala- (or *tall-) 'wh-?' (e.g., 'where, when?') *263. Its original function is perhaps interrogative, but if so it also generally replaces relative *-a- in PA and Wiyot (where *-a- drops). *tala- would be an example of nonreplacement.

Third, an enclitic PA *-t- [from *-t- 'be' ?], inserted between a demonstrative pronoun and PA *-hok [from *al-hok?] 'in the direction of' signals a fixed spot: Ak *tanahka 'where' versus K *tanahka 'where to?', and Pe *patak 'there' (Voorhis 1979:72) versus F *mannahka 'in this direction' [with Pe *ma 'that (animate)', and F *mon 'this'].

Fourth, prefixed to a directional root in Algonquian it removes any connotation of motion. For example, with the associative deictic *-a- 'thither' - generally attested elsewhere in its a-grade vowel form - it forms a composite root *-tala- [with *a- prefixed for initial change] 'there' *223, usually used as a preverb, specifying static locations. Thus, compare Pe *tal- 'at that place' versus al- 'to that place' (Voorhis 1979:73), W *tanahtow 'she walks there, then, through that length of time' versus *matu- hoka 'she walks thither, is that direction, thus', and F *tanapiva 'she looks there' versus *matu- hoka 'she looks thither'.

It is possible to suggest an etymology for the unique kind of initial change found in this stem in PA. Changed *entala- perhaps reflects the sequence: relative *-a- 'where, when, etc.' *259a plus demonstrative *al- 'there' *246, plus *tala- 'at that place' *223. There is regular initial change (PA *-a-: from *a-), and the archaic but regular loss of *a- before an element beginning in *e- *a-, and *e (Bloomfield 1946:sec.17) as in the case of proposed *al- 'thus, thither' (see *255).

Evidently, the relative and locative pronouns were only incorporated into this stem in the changed mode of the conjunct
[presumably at a time when participles, iteratives, and the like had yet to split into separate modes]. No doubt it expressed the extra specification of location in a verb phrase meaning, e.g., 'there where she walked' (in contrast to independent 'she walked there', and simple conjunct 'where she walked'). [This type of initial change became generally associated with the Algonquian root *t- 'be' in several of the languages (but not Micmac), spreading to other stems in which *t- occurs. In Cree and Nenoxane, unchanged counterparts of the prefix were analogically created.]

10.3. Continuous Aspect. *t- 'be' develops into a marker of continuous aspect in both Wiyot and Passamaquoddy. In Wiyot, *ta is involved: W ta- durative preverb' (e.g., kwewi ta-talki: 'are you going around here?' - Teeter 1964:88, 104). In Passamaquoddy, it is the composite root *tas- [with initial change *ma-]; Pa tsihko 'she is working', etsihko't 'when she was working' (beside luhke 'she works', sluhke't 'when she worked').

It does not seem entirely clear in the Wiyot case if the preverb derives from the verb 'to be permanently located' or directly from its source protas - but its verbal origin is clear enough in Passamaquoddy, where the Pa source is well known (see A254-263). Moreover, the use of a verb 'to be' for continuous aspect is seen in other languages, e.g., Spanish estás ..., -ando 'she's ..., -ing' (as well as in English). Hence, this is probably the path of development in Wiyot as well.

Blackfoot also has a preverb of continuous aspect, aw-.

Its origins are not certain, but it could reflect Pa *aw- 'be there' (Saulteaux and Cree awas-, Ottawa waj-, Pa aya- (Voort 1979:58), Pa ayi- and Mc ay-a- (changed conjunct), Mi -i). This in turn is from Proto-Algonic *ya- 'distant demonstrative'. It is not certain what the stem final was in Pa, but it may be significant that those languages with final -a after this root include permanent location ['dwell, exist?'] in the meaning of the stem (thus putting it in competition with *tas- 'be, exist, dwell'). [For loss of *y between a's, compare *tada beside presumably analogical tayâ 'who, which (animate)?' - composed of interrogative *- plus animate singular -a plus enclitic ya.]

11. Inflection

We have seen in sec.1.2. that Proto-Algonic had 3 degrees of animacy in its demonstrative pronouns: PERSONAL (with inflectional *-a), NONPERSONAL (with inflectional *-i), and INANIMATE (with inflectional *-a). Overriding these distinctions, demonstratives also had a RESTRICTED category (with inflectional *-i). In this
section we take up other uses of these inflectional vowels in
delicta.

The attested Algonquian languages are somewhat inconsistent in
their nongender uses of the inflectional vowels, but a few
contrasts provide clues about the original situation. The best of
these is that in Algonquian a shift of *-i to *-ø is monosyllabic
temporal preverb functions much like the addition of the
iterative infix *-eq- #23, where both signal initial change.
Although initial change has been grammaticalized in PA, its
original function is to convey iteration and to form participles of
mutilal action ('the one who always does X'). Hence, one can
suspect an iterative background for *-ø as well, versus singleness
of occurrence for *-i. Similarly, Cree and Ojibwa use *ni 'future
of possibility' in the plain conjunct, but *ta in the other
(mostly changed) modes of the conjunct.

An iterative meaning for *-eq explains why relative *ta turns
into PA *na (usually changed *nq-), 'preverb complementizer: where,
when, who, what' and W *na 'nominalizer'. The resulting participles
express habitual (durative, iterative) action or state for the
most part. In contrast, *ni provides chiefly locatives of precise
static location: PA *na- 'there', Y *tاه 'where, why', and W *ná
'then (immediately after that)'.

Apart from its use for single specific occurrences, *-i is
generally replaced by *-ø in temporal locatives. Thus, compare
*nu- 'proximal time: when' #244 and *nu- 'distant time: when' #245
with *ni- 'distant space: there' #246. Compare also W *na- 'then, at
that time', *na and *ná- 'then (after doing various other things)'
[Teeter 1964:88], and W *na- 'still [continuing to this time]'.
This, together with our finding in sec.6 that Proto-Algonquian favored
'moving time' rather than 'moving world' metaphors in relating
time and space, suggests that *-ø was used for moving entities as
well as iteration and the like - while *-i is static in contrast.

*-ø is rarely preserved outside of Algonquian, and where it
is its use generally seems similar to that of *-eq. Thus, it
indicates motion in Y we 'went and did' (but compare W *be 'go to
do', see #258). Compare also C -me: in av绶: 'further, beyond'
with W *be postposed particle 'all the way to, beyond'. Similarly,
like *-ø it seems to relate to time in W *be in 'two times' and
dam 'four times', versus space in W *be in 'one place' with *-i.
However, it also has a characteristic reconstructible use as the
inflection of adverbial locatives (generally adlocutives and
translocutives):

(268) *-ø 'adverbial locative': PA *-q (F, K -q; C -q), W
-*ø (usually attested as -ø since it is rarely breath-group
final). Examples: F navhkami-tenepohke 'all night', F
nar-w-kohpikani:ve 'in the middle of the sea', K m3 kisheker 'in that month', K m3 Capability 'in the middle of the street', C awasite: 'on the further side (in time or space)', C orte: 'not'. W kukw' 'in the old days', 

As the examples show, where duration, motion, or distance from a reference point are involved, this inflection is used for reference to space as well as time. It is only when a specific static point is mentioned that locative *~n is used (compare My nohi 'here to me' and K roohi 'here'). In light of the relative similarity of their (nongender) meanings – and the fact that they are vowel grades of each other – it seems likely that *~n and *~n have a common origin.

*~o has a wide variety of uses besides restricted location, in which I discern no pattern (perhaps because it is so poorly preserved in Algonquian, the branch of Algic I know best). It is used to help form plurals in Wiyot, and in a topic marker in Yurok: W to 'verbal plural', and topicalizing Y ra? 'and then'. It is unmarked against emphatic *~o in Yurok: compare the emphatic topic marker Y to. There is also the preverb Y oo 'come, go', and ku 'go and do (future) beside Y ku 'future'. Other examples:

*To 'the one previously mentioned (restricted)' (251): PA *~ku (We ortekete: 'there [at a place previously mentioned]' [Voorhis 1984a:37-4], W ku 'that', Y ku 'that, the', used to modify a noun) and as relative-interrogative 'who?'. Compare W ku '(back) again': kwis-hu-luwi:s 'suddenly she came back again' (Teener 1964:68).

*To 'relative pronoun (restricted)' (259c): PA *oo: 'locative (restricted)' (Moosé Cree or 'immediate vicinity': [laima: or 'where (right around here)?'] C orta, W -oo: 'here'; W hu-hu-ta-luwi:w 'when they dance', kutwi:s, hu-ta-6ikw 'persons who die' (Teener 1964b:107).)

This gives the following spatio-temporal inflectional endings in deictics (besides *Vnki: 'locative' #34 in noun):

(269) *~o [nearlative *~a] 'extended, mottled, durative'.
Since *~o is by far the most common Proto-Algic vowel, this suffix was probably a neutral one which achieved its meaning only from the contrast with the other two (below), and nearlative vowel grade. See #268.

(270) *~i '(extended ?), static, punctual'. The 'extended' category is clear in Blackfoot (and no doubt present in PA), but its Proto-Algic status is uncertain. As an alternative, it could have been neutral with respect to the extended-restricted
contrast.

(271) *-g 'restricted'.

Algic gender could well have arisen out of the association of high animacy with notility, and that of persons with the mellorative vowel grade. Hence, where JULILK entities are involved, personal gender would be expressed with mellorative *-g and nonpersonal gender with neutral *-e. Inanimate entities would be static, and thus would take *-g. If so, this 3 category quasi-gender system could have given rise to the differing gender systems of PA and Yurok directly - and we perhaps should not reconstruct fully-developed gender for Proto-Algic at all.

12. Discussion

We have seen how the Proto-Algic demonstrative and discourse pronouns have evolved not only into the sorts of grammatical markers Greenberg uncovered (mainly in the Bantu languages), but into some others as well. Sometimes the mechanisms of change are simple: one component of the meaning of a pronoun is selected, and the pronoun becomes a marker of it. Examples of this are 'otherness' in the associative delictic giving rise to obviation, and 'being there' in several instances giving rise to 'being'.

Another proposed universal tendency, for which there is considerable evidence in Algonguin (see Proulx 1988:318), is that distals evolve into proximals but not vice versa. The question that naturally arises is: if distals keep changing into proximals, where do all the distals come from? In such semantic domains as color nomenclature and cardinal directions, old terms are constantly being replaced by words specifying more salient entities closely associated with them: 'red' by 'bloody', 'south' by 'noonday (sun)', and the like. So the question becomes: what salient entities are associated with distal position?

As one of the two sets of PA demonstratives I reconstructed elsewhere (Proulx 1988:315-317) are locatives in the Proto-Algic system, it appears that locatives are a possible source for demonstratives (if the semantics are correct in the two reconstructions). That is, a position in space is more salient than an entity located at a specified position - perhaps because it's semantically simpler.

What we have here is semantic evolution from the simple (and specific) to the complex (and general), with diminishing salience. The further evolution of demonstratives into discourse pronouns continues this pattern, for the latter additionally
specify prior mention or assumed knowledge of the entity specified. It is only once an element criticizes that grammaticalization begins — and with it renewed semantic simplification.

13. Conclusions

Proto-Altic had two single-consonant demonstrative roots (*之事, *之-) and two locatives (*之-, *之-), each with a latal for the proximate and a palatal for distal reference. It had two discourse pronouns: *之- 'previously mentioned', and *之- 'known but not previously mentioned'. The former is semantically associated with past time, the latter develops into Algonguan future markers.

The inflection consisted of only 3 endings, all referring to the distribution of entities relative to spatial or temporal dimensions (with past = distal, future = proximal): *之- [mellorative =-之] 'extended, motile, durativo', *-於 'extended?'), static, punctual', *之- 'restricted'. The development of the MOTTLE-STATIC and vowel grade distinctions into those of gender follows quite naturally [e.g., humans are *MOTTLE, *MELLORATIVE]. It is not certain if this had crystallized into a gender system in Proto-Altic, or whether it did — in slightly differing ways — in Algonguan and Yurok.

The following deictics (with temporals in parentheses) are reconstructible:

<table>
<thead>
<tr>
<th></th>
<th>PROXIMAL</th>
<th>DISTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATIVES:</td>
<td>*之, *之</td>
<td>*之, *之</td>
</tr>
<tr>
<td>KNOWN BUT UNMENTIONED</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DISCOURSE</td>
<td>*之, *之</td>
<td>*之, *之</td>
</tr>
</tbody>
</table>

Proto-Altic also had an associative deictic (*之- 'like another'), a relative pronoun (*之-), a personal pronom base (*-之[之]-), and a set of interrogative pronouns (*之[之] 'who?', *之[之] 'what?', *之[之] 'wh-').

Altic demonstratives and discourse pronouns have evolved
NOTES

1. Languages, their abbreviations, and the sources from which they are generally cited are as follows: Abenaki-Ab-Laurent (1884); Lenni-Ch-Charlap (1884); Swampy Creek-Ch-Voorhis (1984); Western Creek-FC-Parrish and Watkins (1933); Delaware-D-Goddard (1969); De-Dunham, SD-Defrise; Fox-P-Bloomfield (ms.); Kickapoo-E-Voorhis (1974); Lou-P-Bray (1975); Mahican-Mh-Mastay (1982); Menominee-M-Bloomfield (1975); Miami-Mi-Voegelin (1937-40); Micmac-Mc-Proulx (field notes); DeBlais and Metallic (1984);动作-N-Trumbull (1903); Ojibwe-Ö-Bloomfield (1957); Central Ojibwe-BO-Barraga (1879); Western Ojibwe-O-Nichols (1979); Central and Eastern Ojibwe-KHeh-Rhodes (1983); Passamaquoddy-P-LeSourd (1984); Penobscot-Pe-Voorhis (1979); Proto-Algonquian-PA-Aubin (1975), Siebert (1975); Saulteaux-Uxo-Voorhis (1984b); Shawnee-Sh-Voegelin (1937-40); Wiyot-W-Teeter (1964); Yurok-Y-Robins (1950), Proulx (field notes).

PA reconstructions found in Aubin (1975), Bloomfield (1946), and Siebert (1975) are respectively identified with the letters A, B, and S plus the item number.

Transcription generally follows that of Siebert (1975) for Algonquian, Teeter (1944b) for Wiyot, and Robins (1958) for Yurok. However, the following changes have been made: PA is written for *A, PA *g for *G, PA *h for *H, PA *s for *S, PA *w for *W, for *x between vowels, W t for h before a consonant, W a for g, W j for a, and Y y for inverted y. For discussion of the changes, see Proulx (1984:168-169). Orthographic concessions to my word processor: a wedge is written as a, o wedge as o, schwa as a, and Menominee epsilon as e.
2. According to Greenberg (ibid. p.61), a discourse deictic becomes an article at the point 'where it becomes compulsory and... [includes] things known from context, general knowledge, or... the only member of its class'. However, he also recognizes that 'certain languages are on the borderline between two stages' - and this would seem to be the case for Cheyenne (with its 'unused' deictics) and Wiyot (with ti), as we shall see. [Teeter (1964:95) calls ti an articular preverb, but it clearly doesn't meet Greenberg's definition of an article.] In what follows, I shall assume it is possible for such borderline discourse deictics to become grammatical markers without necessarily having been compulsory articles.

Wayne Lesan (1984:330-332) describes two Cheyenne discourse pronouns which make anaphoric reference to entities already known to the addressee. In his examples, one set - which he calls EVALED - have as antecedents noun phrases containing an ordinary demonstrative pronoun [which in turn have common nouns as antecedents]. Another set, which he calls UNUSED - presumably because there has been no prior use within the discourse of the entities they refer to, have the addressee's background knowledge as antecedents. Both sets are somewhat article-like in their usage, making no reference to the entity's position in space [though their morphology suggests that they originated from a spatial metaphor, intra-discourse being 'near' and extra-discourse 'far'].

It is partly by analogy with these pronouns that previous mention or its absence are suggested as distinguishing features for the Proto-Algonkian discourse pronouns.

3. The opposition between PA *a and PA *a in neutralized before a morpheme boundary (with a before *a before a and a elsewhere) - but in this environment the Proto-Algonkian grade variation is still affected by the PA doublet of a and a, as in PA 'mai- 'windward' versus PA 'upriver' (Faries C cunim 'windward', uatinuk 'up the river', and compare Piles C cunutl'swan 'she walks up the river' for segmentation).

In consonant clusters, a and a are treated variously according to the language and their relative position in the cluster and word: common reflexes of a are zero, a, a, and less-common a, while a gives a and a (see Proulx 1984:sec.8). In particular, Yurok regularly has a and Wiyot a and its grade -eiat a from a in clusters (Algonkian #116, 111, 112). In addition, PA a seems to correspond to Y a in word final position (Algonkian #29, 30, 111, 219). Thus, it is really only initially and between consonants that the new analysis changes anything.

4. The vowel length in Me -test' (TA) and -call'T (TI) could result from stress [i.e., PA 7-6], but this does not explain the initial Me i. More likely, there is incorporation of -teh' heart (medial)' A2025, which is associated with thinking in Algonkian [W
'think' (with d- 'that way') - Teeter 1964:107-108), wakw 'heart', F liitterewa 'she thinks thus' (jí- 'thus, that way'), Pa *-tokhi 'heart' A223, 1112. That is, perhaps *-teit-ilem -> MC -teil'm.

A sequence of sonorant plus short weak vowel (plus nasal) drop in Micmac before a homorganic obstruent, as in MC -teit'ing above, but this does not cause lengthening of the preceding vowel: Mc alak 'I look around for her', alap't'm 'I look around for it' [from PaC *aival- 'around' *#56, Pa *-arum and -apantam (reconstructed without the *am) A47, 49].

5. Possibly what is added here is cognate to Pa *-ayaki 'kinds, sorts, ways, places': F nekot(w)ayaki 'one group, set', ni:bowayaki 'two kinds', C nityawak 'in three ways, kinds, places', me:wayak 'in four ways, fourfold'; F taswayaki 'so many kinds', C tahtwayak 'in so many ways'. A contraction of Proto-Algonk *ayak to TO or seems plausible, as this is the established reflex of *Ayak (Proulx 1984:196).

6. In Algonquian, the above is generally replaced with: Pa *-tahk- 'so much, so many' A204-2015 (Mc taje- 'how many?' refers the special stress - elsewhere written l). Compare also Mc taje- 'that many', with initial change. After this numeral Pa had an optional *-w, doubtless analogical with post-nominal *-w (e.g., *nokwetasik '6' A121).

The Micmac stems, contrasting with the locative relative Mc t'i-l- and changed at'k-l- 'where, there', show that the PA stem begins in *- rather than underlying *-(e)n-. However most of the Algonquian languages, whose conjugats are less prominent than Micmac's, have relearned their changed conjunct stems to psPA *entahk- A264 by analogy with the locative relative ('where'). Menominee has also analogically created an uncharged counterpart of both (used in prefixed forms), reflecting psPA *entahk-. Cree has generalized a root reflecting psPA *entahk-, e.g., *tahkaw 'she is so many'.

Examples of this element in counting: Mc sli:wik'nek tseipimunat 'she's 7 years old' (naipimunat 'she's 5 years old' - and cf. N tahk-konkamow 'she is so many days old' ). In Algonquian, this type of phrase largely replaces the variety in *#26 - always, when a classifying medial is involved: Mc asakom tseipak:stiik '6 things cylindrical in shape', N nohtikan tahnasipik '7 strings' (nisipusk '2 strings').

7. It is not clear what the social or linguistic correlates of such a shift in metaphors may be, but it is clear enough that Iroquoian influence could not have been involved. Neither is it
clear how early the shift in metaphors took place, or even if it
dates back to PA. For example, the glosses of Delaware nigani
'before' and Ab nikoqivi 'ahead, before' Al508 could mean
that these languages retain the moving time metaphor under
Iroquoian influence - assuming 'before' means 'earlier' here -
and my sources on Montagnais, Passamaquoddy and Micmac show no
signs of either metaphor [glossing their cognates for special
reference only]. Possibly, the shift in metaphors took place
during the first Central-Eastern period, only later spreading to
western Cree.

Against this, however, is the fact that Blackfoot has the newer
Algonquian pattern: *isakšt-. 'the one behind, of long ago'
(Taylor 1969:208) from PA *eskw- (M eskw- 'last, left
over'). The alternate *apaiškšt- 'the one behind, in the
north, the ancient one' and *amškškšdpt-. 'the one ahead, in
the south' further ties the cardinal directions into this
metaphor.
REFERENCES


----------. Ms. Fox and Cree dictionary. In possession of C.F. Hockett.


press.

Hockett, Charles F. 1948. Potawatomi I-III. *JAL* 14:1-10, 63-73, 139-149.


