Appendix III: Initial Vowel Loss in Algonquian Prehistory

Algonquian Word Shapes and Evidence for *e-Loss

As mentioned in both the post on Proto-Algonquian and the post on rethinking Proto-Algonquian (PA) and Proto-Algic vowels, there is evidence that at some point in the prehistory of Algonquian, initial *e- (Goddard's "*i-") was lost in most cases. But while Goddard places this change between Proto-Algonquian proper (= “Proto-Algonquian-Blackfoot”) and Proto-Core Algonquian, this is unlikely for various reasons, and it probably occurred at some time prior to Proto-Algonquian.

There are two main pieces of evidence that such a change did take place at some point. First, the distribution of initial *e- in PA was extremely restricted, found in only a bit over a dozen roots. *e- occurred only before some consonant clusters, in several relative roots, in several demonstrative stems, and in the Initial *eren- “regular, ordinary, real” (Goddard 2018:99). Based on the forms in which it is found, I once thought the original change might be able to be generalized as: “word-initial *e- is lost except before certain consonant clusters or an approximant, or if the resulting word would contain only a single, short vowel,” with “approximant” defined as *h, *w, *y, and *r, as well as *θ, the voiceless counterpart of *r (but see footnote 1 below). Remaining cases of initial *e- could then be explained as either analogical, or as perhaps not having really begun in *e- in PA, in the case of demonstrative stems beginning in *en- (which might have begun in *an-: see here).[1]

Second, the several relative roots and other relative elements beginning in *t- (e.g., *taθ- “in such a place”) became *-ent- when taking a personal prefix, and irregularly formed initial change (a modification applied to the first vowel in the verb complex in certain contexts: see below) by prefixing *e-n- instead of applying ablaut to or placing an infix before the initial vowel of the verb (thus, the changed form of *taθ- was *e-ntaθ- rather than the expected *teθ-): e.g., Unami tala·wsu “s/he lives there” but (with a personal prefix n-t-) ntala·wsı̆n “for us to live there” and (with initial change) yú entala·wsı̆nk “here where we live” (Goddard 2018:100). These roots clearly originally began in *ent-, but lost the initial *e- (and following *-n-, because initial true clusters are disallowed in PA) while retaining these hints of its former presence. (There is actually a complication to this picture, for which see the end of the document.)

Relative Chronology and the “i-Prefix” in Blackfoot

Goddard’s reason for reconstructing this change as occurring after the separation of Blackfoot (Bl) from the rest of Algonquian is that Bl has a very large number of verbal and other roots/stems which seem to begin with |I-| = /i-/ in non-initial position, and when these have cognates in Core Algonquian, the cognate "lacks the initial vowel, e.g., Bl -ipon- “terminate, end, be rid of" (as in

1 However, my original formulation is probably not tenable, because while *θ does seem to have functioned as the voiceless counterpart of *r in some ways, it was also very likely an obstruent of some sort, either a fricative or a fricative that could sometimes be realized as an affricate (see here). The environment for where "e-loss occurred as a regular sound change thus probably needs to be reformulated.
-iponiistam- “take off (a robe) (TA)” : Proto-Algonquian *po-n- “cease.” In word-initial position, these Bl roots often have allomorphs which lack the /i-/ and display other characteristics of roots in initial position such as failing to shorten of original long vowels (e.g., the initial allomorph of -ipon- can be poon-, as in pooníístamisa! “take it off!”; cf. áaks iponíístamiiwa “s/he will take it off”). In addition to the roots with /C-/ ~ /iC-/ allomorphy, there are also some, mostly verbs, which always begin in /iC-/. The existing Bl dictionaries list most verbs with /C-/ ~ /iC-/ allomorphy as being /i/- initial, and nouns with such allomorphy as being consonant-initial. Goddard concludes that while some of these may represent cases of analogical extension, many are examples of verbs and other roots which began with *e- (his *i-) in PA, still show /i- in Blackfoot, but lost it in Core Algonquian.

There are both what could be called external and internal difficulties with this position. The external difficulty is that it has no Algic support. If many of these roots reflect an original *e-/*i-, at least some should have Algic cognates with an initial vowel as well, but so far I have not found a single example of this. Of my list of convincing and attractive Algic cognate sets (see Appendix I of the vowels post), seven terms (as of May 1, 2021) have a Core Algonquian reflex beginning with a consonant and a likely Bl reflex with an initial /I-/. These sets are #53 FINISH, #56 URINATE, #58 STEAL, #60a LONG, #61 SHORT, #71 DAYLIGHT, and #95 DOWN2. As shown in the table below, in none of these sets do the Wiyot or Yurok cognates have an initial vowel. When they differ, the Bl column lists the non-initial allomorph of each root/stem first, followed by the initial allomorph; non-cognate material is in [ square brackets ].

<table>
<thead>
<tr>
<th>SET</th>
<th>PA</th>
<th>Blackfoot</th>
<th>Wiyot</th>
<th>Yurok</th>
</tr>
</thead>
<tbody>
<tr>
<td>FINISH</td>
<td>*ki·š-</td>
<td>(-)iksist- (~ -iksist-, ksist-)</td>
<td>kit-</td>
<td>kič (cog.?)</td>
</tr>
<tr>
<td>URINATE</td>
<td>*šek[-i-]</td>
<td>(-)(i)skasi-</td>
<td>tik[-al]-</td>
<td>?ahk-</td>
</tr>
<tr>
<td>STEAL</td>
<td>*kem[-wet]-</td>
<td>-ikam[-o'si-], kaam[-o'si]-</td>
<td>kem[al]-</td>
<td>kem([al])-</td>
</tr>
<tr>
<td></td>
<td>by-form: ‘secretly’</td>
<td>*ki·m-</td>
<td>(-)iksim- (~ -iksim-, ksim)-</td>
<td>—</td>
</tr>
<tr>
<td>LONG</td>
<td>*kenw-</td>
<td>(-)inn-</td>
<td>—</td>
<td>knew(-)</td>
</tr>
<tr>
<td>SHORT</td>
<td>*taxkw-</td>
<td>-isaahk-, saahk-</td>
<td>—</td>
<td>tk&quot;-</td>
</tr>
<tr>
<td></td>
<td>DAYLIGHT</td>
<td>*ki·š[(w)ek-wi]; *ki·š[ek-at-wi]</td>
<td>-iksistsiko-, ksiistsikó-</td>
<td>kit[okwa]; kεč[ɔy]; kεč[ɔʔ]</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DOWN2</td>
<td>*pen-</td>
<td>(-)inn-</td>
<td>—</td>
<td>pen-</td>
</tr>
</tbody>
</table>

Yet even without these Algic comparisons, there is extensive Algonquian-internal evidence militating against the conclusion that Blackfoot initial /i-/ in forms like these reflects PA *e-.

First, the phonological shape and behavior of the verbal roots with the “i-prefix”—to use Berman’s (2006) name for it—indicate that the first consonant was at one point word-initial and that the vowel following this consonant was at one point the first vowel in the word, as Goddard himself partly concedes (2018:100-101). Several PA consonants have different reflexes in Bl depending on whether they were word-initial or word-medial: *č, *š, *r, and *θ all merged as |-t-| medially but |s-| initially, *t remained |-t-| medially but became |k-| initially, and *s remained |s-| initially but became |-xs-| medially. (Bl underlying |t| and |k| surface as /(s)t(ŋ)/ and /k(ŋ)/ depending on neighboring vowels.) In Bl roots with the i-prefix, the following consonant always has its
word-initial reflex, not its medial reflex, e.g., (-i)ko’ko- “be night (II)” ← PA *tepexkatwi, cf. ko’kóyi “last night” and ko’kóki’sommi “moon” and cf. also Bl |t| (here /tʰ/), not |k|, as the medial reflex of *t in (-)itsit- “catch up to (TA)” ← *mataθ-; another example is -i)sim- ~ (i)sim- “stab (TA)” ← *še·m- (with fossilized initial change), cf. Bl |t| = /ts/, not |s|, as the medial reflex of *š in -otsimotaa- “escape, flee (AI)” ← *wešimó- “run away (AI)” (Berman 2006:268, 271, 275). That the consonants following the i-prefix have their initial reflex shows that they were originally word-initial in pre-Blackfoot and by extension in Proto-Algonquian, just as in the Core Algonquian languages.²

Furthermore, when roots with the i-prefix undergo initial change, change is applied to the vowel in the syllable following the [I-]. As mentioned in both posts, initial change (IC) is a process in which the first vowel of a verb complex, in certain morphosyntactic contexts, is ablauted or inserts a preceding infix. In PA it was used with participles and the iterative, and probably also marked perfective aspect or something similar. In Blackfoot it is no longer productive, but several dozen verbs retain some form of it, used to mark past tense or participialization. Fossilized IC is found in some additional roots with PA etymologies, sometimes alongside related forms in which IC is lacking. It can take various forms, most commonly infixed -ay- or shifting various vowels to |aa|, both patterns of PA date. In verbs with the i-prefix, IC always occurs on the vowel in the syllable following the /i-/ (and the /i/- usually doesn’t appear); since IC in Algonquian otherwise always applies to the first vowel of the verbal complex, this again shows that the verbs in question began with consonants in the prehistory of Bl, otherwise it would be the i-prefix itself which undergoes change.³ A couple examples: (-i)pakksskaa- “burst, break open (AI)” (← PA *pa·šk-) as in nitsípakksskaa “I blew up (in anger),” changed payákksskaawa “s/he burst” (← *paya·šk-); -ikahk- ~ ka(a)hk- “sever, cut” with fossilized IC in the syllable following /i-/ (← *ka·šk-, changed form of *ki·šk-; unchanged form found in the derivative ksísskstakiwa “beaver”) (Berman 2006:271, 273).

Finally, Goddard (2018:104, n. 14) says that “[o]n the available evidence it would seem preferable to take this variably present i as an underlying segment, with moderately complex conditions on its deletion, rather than to take it as an i inserted by phonologically unnatural rules.” First, even if

² Berman (2006:268) does give one example where Bl shows the medial rather than initial reflex of a consonant after the i-prefix: -itsiy- “fragrant, sweet” ← *ši·w- “have a strong taste (II)” (where the initial reflex of PA *š would be |s|, not |t| = /ts/). He suggests the shape of this root results from blending with -itsiy- ~ -itsow- “high quality, pretty.”

³ It’s actually possible that the prefix does undergo initial change sometimes, given that one way of marking past tense in Bl is prefixing i- and deleting any initial vowel; /i/ is the regular reflex of, among other things, PA *e-, which was the normal changed form of *e. But another possibility, in my view at least as likely, is that this i- prefix/ablaut is a reflex of the PA so-called “aorist” preverb *(y)e·h=, which in many daughters essentially serves to mark the same categories marked by IC, or conjunct verbs more broadly. Whatever its origin, this i- prefix is optional and occurs broadly with almost any verb including ones that don’t begin in [I-] (e.g., okska’si- “run (AI)” as in aakokska’siwa “s/he will run” and (unmarked past) nítókska’sí “I ran” vs. marked past òáská’siwa “s/he ran” and nitsííkska’sí “I ran” [Frantz 2009:37]). So if it does ultimately derive from IC of PA *e-, it has considerably expanded its permissible environments.

Note that Berman (2006:279) has argued that Bl reflects PA initial *e- as nii-, presumably by way of (*/jæ:/ →) */ji:/, but he cites only one possible cognate set for it and I don’t think even this is entirely convincing. If he turned out to be correct, though, then i- is probably not a regular reflex of either *(y)e·h= or initial change of *e-.
this were true as a synchronic statement of Blackfoot grammar, that does not mean it must be true diachronically. In fact, the roots which take the i-prefix can be defined quite well phonologically: those beginning in an obstruent—or, in historical terms, those which in PA began in *p, *t, *č, *k, *s, *š, *θ, or *r—though there are some complications involving roots beginning with /s/. As Berman (2006) shows, PA verbal roots of other shapes have different Bl outcomes, but these show a general tendency to have distinct medial and initial forms of roots (see below): those beginning in a nasal usually dropped the nasal; those beginning in *w- retained it or changed it to y- under unknown conditions; and those beginning in *we- changed to o- when PA *we became /o/ in Bl as it did in all non-Eastern languages.

Second, besides not seeming to be an accurate diachronic picture, Goddard's suggestion is almost certainly an improper analysis synchronically as well (see e.g. Weber 2020b:262-280 for some theoretical arguments, but it has long been analyzed as “connective i” [e.g., Taylor 1969:75-77]). Synchronically, the i-“prefix” is just a linking/epenthetic element inserted before any obstruent-initial root when that root does not begin a word (except in certain cases with /s/-initial roots) and the preceding morpheme does not end in /-i/. In synchronic terms, other roots that historically took the i-prefix are now just /i/-initial roots—having generalized the medial allomorph of the root—and so require no linking /i/ in composition.

If it doesn't originate in PA roots with initial *e-, then where does the Blackfoot “i-prefix”/connective -i- come from? The most plausible answer, following Weber (2020a) and several participants in the discussion of that paper, seems to be that it was primarily the result of resegmentation of the boundaries between preverbs and verb stems, probably aided somewhat by other processes as well. Bl preverbs and roots/Initials show different properties from preverbs and Initials in other Algonquian languages. This includes the fact that in most of Algonquian, preverbs have alternations, edge constraints, and so on at their right edge but not left edge. In particular, most particles, and preverbs derived from them, in PA ended in *-i, and there is often alternation between a preverb ending in *-i and a corresponding verb Initial ending in a consonant, though the conditions under which the preverb or the Initial is used can be complex, language-dependent, and to some extent semantically governed. (As an example, Plains Cree has the Initial māt- “begin, start” and a corresponding preverb māci-, as in māci-píiskwē “s/he starts speaking,” mātatoskē “s/he begins to work,” and māci-atoskēw ~ māc-atoskēw [with sandhi] “s/he starts working” [Weber 2020a:50-52].) In Bl, on the other hand, it is the Initial (i.e., the root = beginning of the verb stem) which features alternations, edge constraints, and so on, on its left edge—including the variable presence of an /i-/ which based on its morphophonemic properties must go back to PA *i. It seems likely, then, that what essentially happened is that in pre-Blackfoot the location of preverb boundaries was reanalyzed, placing it before the *-i rather than after it. This would be in line with other ways and cases in which Bl has basically resegmented various morphological elements in words.

This is a simplified picture which ignores various things. Additionally, there were probably other processes that also contributed to the development of connective -i-, including the generalization of |-I-| to be Bl's universal epenthetic vowel (except before inflectional suffixes or when the next
syllable contains /o/). In any case, once |-l-| had become the universal way of linking obstruent-initial roots to preceding elements within the same word, many verbs eventually generalized the much more common non-initial allomorph to initial position as well, essentially reanalyzing the |-l-| as part of the stem (cf. Weber 2020b:265). For example, take the root “-ipon-” “terminate, end, be rid of,” cited earlier, which occurs in some verb stems that always begin in /i/- and others which begin in /p/- and take connective -i-, seemingly at random: poniowat- ~ -iponiowat- “leave one’s wife (TA)”; (-)iponihtsi- “die, be unconscious (AI)”; ponota’si- ~ -iponota’si- “sell livestock, have one’s horse die (AI)”; (-)iponoohki- “lose one’s horse (AI)”; etc. Certainly this sort of pattern is unexpected if the initial /i/- were original in this root, but it is exactly what we might expect to see if speakers were irregularly generalizing the non-initial allomorphs of individual stems with /C/- ~ /-i-C/- allomorphy to word-initial positions as well.

Remaining Issues

There are still a few issues I don’t have good answers for at the moment, including the fact that the Algonquian relative roots beginning in *|ent-| (*t- ~ *-ent-, changed *e·nt-), when they have known or possible Algic cognates, consistently lack initial vowels in the other Algic branches (as in sets #50a, #50b). I’m not sure what the explanation for this is, though it seems unlikely that Wiyot, Yurok, and Algonquian all lost initial **a(C)-/*e(C)- in most cases.

One other issue with these relative roots should be mentioned, which is that they actually show an overt initial vowel + consonant cluster in unexpected contexts in a few languages, e.g., Plains Cree ihtāw [rather than *tāw] “s/he is there, exists” ← *(en)te-wa (with leveling of *e· to /a:/); ihtasiwak [rather than *tasiwak] “they are so many; they number so many as a family” ← *(en)tahšiwaki (Goddard 2015:405, n. 84; Wolvengrey 2015–). Most plausibly this just represents a generalization of the non-initial allomorph to initial position, aided by the analogical model of the initial-changed forms beginning in ēht-, and similar explanations are presumably the case for the similar situations in other languages.

Sources Used

(“AL” = Anthropological Linguistics)
(“CWPL” = Calgary Working Papers in Linguistics)
(“IJAL” = International Journal of American Linguistics)


