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Morpheme Structure Change in Labrador Inuttitut

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1. Introduction

Introduction

We propose that Labrador Inuttitut has recently undergone a series of morphological changes that affect verb and noun roots as well as affixes.

Whereas other Inuit dialects have verb and noun roots that end in a vowel and a variety of consonants, in Labrador all roots end in a vowel.

In a related change, a class of suffixes that begin with a single consonant in other Inuit dialects have been reanalyzed in Labrador as beginning with two consonants.

We argue that these Labrador changes have been facilitated by the widespread regressive consonant assimilation that obscured the location of the boundaries between roots and affixes.

Introduction

The resulting changes amount to a regularization of morpheme structure that makes morpheme boundaries easier to locate.

The plan of this presentation is as follows:

- Following this introduction we begin in section 2 with a review of Labrador consonant clusters.
- In section 3 we show how verb and noun roots have been reanalyzed.
- Affixes are discussed in section 4.
- In section 5 we briefly look at a complication introduced by the Law of Double Consonants (Schneider's Law).
- Section 6 is a conclusion.

2. Labrador Inuttitut

Consonant Clusters

Labrador Inuttitut consonant clusters

Labrador Inuttitut consonant clusters historically underwent complete regressive assimilation.

The result is that mixed clusters of cognates in conservative dialects of Inuktut such as Paallirmiutut (Inuktut Tusaalanga 2020) in (1a) correspond to geminates in Labrador (1b).

In (1a, b) the regressive assimilation is obvious: in Labrador, the second consonant of each cluster replaces the original first one to create a geminate.

(1) Consonant clusters in Paallirmiutut and Labrador

a. Paal.	tuktu	nipku	tiŋmiat	niɣlinaqtuq
b. Lab.	tuttuk	nikkuk	timmiat	nillinattuq
	‘caribou’	‘dried meat’	‘birds’	‘cold’

Labrador Inuttitut consonant clusters

In (1c, d) we see the result of affrication of voiceless fricative geminates in Labrador (Dresher & Johns 1995).

In ‘caribou fat’ and ‘moon’ original /q/ became a fricative /x/ (or /χ/, these are allophones) in Labrador. Assimilation would have given *[xx] which was affricated to [kx].

In ‘dried fish’ Paal. /h/ corresponds to Lab. /s/; as with /xx/, /ss/ is affricated to [ts].

(1) Consonant clusters in Paallirmiutut and Labrador

c. Paal.	patqut	tatqiq	piphi
d. Lab.	pakxujak	nikxik	pitsik
	‘caribou fat’	‘moon’	‘dried fish’

Labrador Inuttitut consonant clusters

Assimilation obscures the lexical identity of coda consonants.

In the examples below, the consonant clusters are mostly mor–pheme internal; thus, Labrador speakers would have no way to recover the original coda consonant.

(1) Consonant clusters in Paallirmiutut and Labrador

a. Paal.	tuktu	nipku	tiŋmiat	niɣlinaqtuq
b. Lab.	tuttuk	nikkuk	timmiat	nillinattuk
	‘caribou’	‘dried meat’	‘birds’	‘it is cold’

a. Paal.	patqut	tatqiq	piphi
b. Lab.	pakxujak	nikxik	pitsik
	‘caribou fat’	‘moon’	‘dried fish’

Labrador Inuttitut consonant clusters

We contend that the effects of this large-scale assimilation are not limited only to morpheme-internal clusters: regressive assimilation also affected morpheme-final consonants when a consonant-initial morpheme was affixed.

For example, the second cluster in the word for 'it is cold' historically occurred across a morpheme boundary; however, the identity of the final consonant of /-nnaC/ cannot be discerned.

We propose that the loss of coda contrasts in Labrador has facilitated an unrecognized wide-ranging reanalysis of the morphology of Labrador Inuttitut (see Smith 1975, 1977 for elements that point to this change).

[nillinattuk] *derived from* /nilli+nnaC+tuk/

3. Verb and Noun Roots

Verb roots

In many dialects of Inuktut, again exemplified by Paallirmiutut (2a), verb roots end in a vowel (V) or in /t, k, q/ (C).

This is reflected in the allomorphy of mood markers such as the participial, which begins with /j/ after V and /t/ after C.

In Labrador (2b), all verb roots now end in vowels.

(2) Verb roots in Paallirmiutut and Labrador

a. Paal.	niʁi-jut	tikit-tut	pihuk-tuq	miʁiaq-tuq
b. Lab.	niɣi-jut	tiki-jut	pisu-juk	miɣia-juk
	‘3PL are eating’	‘3PL arrived’	‘3SG is walking’	‘3SG is vomiting’

Noun roots

Consider now noun roots. Bare nouns in other Inuktut dialects (3a) end in diverse segments.

By contrast, Smith (1977) states that all Labrador noun endings have been neutralized to /k/ (3b).

This /k/, however, is a citation affix (Andersen & Johns 2005), not part of the underlying form.

(3) Noun roots in Paallirmiutut and Labrador

a. Paal.	kiati	kiɣut	kiŋuk	iɣliq
b. Lab.	kiati-k	kiɣuti-k	kiŋu-k	illi-k
	‘blouse’	‘tooth’	‘sea louse’	‘bed’

Noun roots

It is interesting that Aleut, at the western edge of the Eskimo-Aleut territory, appears to have a similar pattern.

In Aleut, all (or many) noun roots end in vowels; the absolutive (citation) case is indicated by suffix /-χ/ (4a).

Compare the general Inuit (4b) and Labrador (4c) forms below:

(4) Absolutive nouns in Aleut, Inuit, and Labrador

a. Aleut	ula-χ	ada-χ	achuna-χ
b. Inuit	iglu-	ataata-	anuri-
c. Labrador	illu-k	ataata-k	anuɣi-k
	‘house’	‘father’	‘wind’

4. Affixes

Morphological reanalysis of Labrador affixes

We propose that the loss of coda consonants in both verb and noun roots is part of a single phenomenon related to the loss of coda contrasts in Labrador.

We further argue that final consonant loss is related to a general morphological reanalysis involving affixes:

> Consonant clusters that originally occurred across morpheme boundaries have been reanalyzed in Labrador as belonging entirely to the following morpheme.

Morphological reanalysis of Labrador affixes

This change was already observed by Smith (1975: 105 n.21) in an interesting footnote:

> "The list of postbases beginning with a consonant cluster seems to be increasing as young speakers neutralize the morphophonemic distinction between stem-final /k/ and vowel, and relexicalize base-final /k/ as affix-initial."

Smith believed that a contrast between vowel- and consonant-final noun and verb roots still existed in the late 1970s (see Nicoll 2019 for discussion).

Morphological reanalysis of Labrador affixes

Thus, Smith (1978) observed a distinction between *inummit* 'person-ABL.S', from C-final /inuk-mit/, and *nunamit* 'land-ABL.S', from V-final /nuna-mit/.

Similarly, he reports a contrast in verbal inflectional affixes between *pisuttuk* 'walk-PART.3S' from C-final /pisuk-tuk/, and *tikivuk* 'arrive-IND.3S' from V-final /tiki-vuk/.

Today we find *inummit* and *nunammit,* and *pisujuk* and *tikijuk* (or –*vuk*); cf. the forms in (2b). That is, these roots no longer show a C-final versus V-final contrast.

Morphological reanalysis of Labrador affixes

Many derivational and inflectional affixes which in other dialects have a single consonant onset now appear in Labrador with two consonants, even when attached to roots which historically end in vowels.

Examples of this reanalysis are shown in (5). Examples in (5a) are from Baker Lake and Paallirmiutut.

(5) Affixes in Baker Lake/Paallirmiutut and Labrador

a. BL/Paal.	V	anuʁi-mut	k/ŋ	inuŋ-mik	q/ʁ	tuluɣaʁ-mik
b. Lab.	V	anuɣi-mmut	V	inu-mmik	V	tuluɣa-mmik
		‘wind-ALL’		‘person-MOD’		‘raven-MOD’

Reanalysis of Labrador case suffixes

In (5a) we have examples of two case suffixes that begin with a single consonant: *-mut* 'ALLATIVE' and *-mik* 'MODALIS'.

These suffixes attach as expected to roots that end in a vowel (V) as well as to roots that end in a consonant: /k/ and /q/ become /ŋ/ and /ʁ/, respectively, before a nasal.

In Labrador (5b) these affixes have been reanalyzed as *–mmut* and *–mmik*.

(5) Affixes in Baker Lake/Paallirmiutut and Labrador

a. BL/Paal.	V	anuʁi-mut	k/ŋ	inuŋ-mik	q/ʁ	tuluɣaʁ-mik
b. Lab.	V	anuɣi-mmut	V	inu-mmik	V	tuluɣa-mmik
		'wind-ALL'		'person-MOD'		'raven-MOD'

Reanalysis of Labrador case suffixes

A comparison of the Nunavik and Labrador case markers shows that this morphological reanalysis is systematic.

Note that Nunavik has one case suffix, the translative, that begins with –CC, the pattern that has been generalized in Labrador.

(6) Case suffixes in Nunavik and Labrador

Case	a. Nunavik	b. Labrador	
Absolutive	–Ø	-k	
Relative	-(u)p	-(u)p	
Modalis	-mik	-mmik	
Allative	-mut	-mmut	
Ablative	-mit	-mmit	
Locative	-mi	-mmi	
Simulative	-tut	-(t)tut	(*rare, not a regular case*)
Translative	-kkut	-kkut	

Morphological reanalysis of Labrador affixes

Learners acquiring a dialect like (5a) would have a lot of evidence that the affixes begin with one C and that the preceding C, where there is one, belongs to the root (see also Fortescue 1992).

The final segment of each root in Baker Lake/Paallirmiutut is apparent in the absolutive case (7b), which has no overt suffix.

Hence, the morphological boundaries between the roots and suffixes are quite transparent.

(7) Absolutive in Baker Lake/Paallirmiutut

a. ALL/MOD	V	anuʁi-mut	k/ŋ	inuŋ-mik	q/ʁ	tuluɣaʁ-mik
b. ABSOLUT		anuɣi		inuk		tuluɣaq
		‘wind’		‘person’		‘raven’

Morphological reanalysis of Labrador affixes

In Labrador, original root-final consonants would have assimila–ted to the initial consonant of the affix.

Following C-final roots the form of the case marker would always be the same, making the position of the boundary uncertain.

After original V-final roots we would have expected **anuɣi-mut*; however, the loss of the distinction between V-final and C-final roots, and the constant appearance of a geminate in the latter could have facilitated a reanalysis of the suffixes to *–mmut, -mmik*.

(8) Absolutive in Labrador

a. ALL/MOD	V anuɣi-mmut	V inu-mmik	V tuluɣa-mmik
b. ABSOLUT	anuɣi-k	inu-k	tuluɣa-k
	‘wind’	‘person’	‘raven’

Morphological reanalysis of Labrador affixes

The change in Labrador was enabled (but not determined) by the fact that all Inuit dialects have a certain number of morphemes that begin with underlying CC clusters.

Such morphemes always delete the final consonant of the root to which they attach and syllabify as C.C; they thus exhibit no sensitivity to whether a root ends in a vowel or a consonant.

An example is Kangiryuarmiut *-pqaq-* 'barely' (Kudlak & Compton 2018).

(9) Kangiryuarmiut: Morpheme with –CC-initial cluster

a. /hinik-pqaq-tuq/	⟶	hini-pqaq-tuq	'She barely slept.'
b. /taku-pqaq-taa/	⟶	taku-pqaq-taa	'He barely saw it.'

Morphological reanalysis of Labrador affixes

In (9a), -*pqaq*- attaches to a root that ends in a consonant, *k*, which is deleted.

In (9b), -*pqaq*- attaches to a root that ends in a vowel.

If we had only these forms to go on, we would not know if the root ended in a vowel or consonant.

In Labrador this pattern has been generalized and has contributed to the loss of root-final consonants.

(9) Kangiryuarmiut: Morpheme with –CC-initial cluster

a. /hinik-pqaq-tuq/	⟶	hini-pqaq-tuq	'She barely slept.'
b. /taku-pqaq-taa/	⟶	taku-pqaq-taa	'He barely saw it.'

Classes of affixes in Inuktut

A further result of the Labrador morphological reanalysis is a simplification in the classes of consonant-initial affixes.

In other Inuktut dialects, there is a distinction between deleting and adjoining affixes:

- Deleting affixes delete the final consonant of the base they attach to.

- Adjoining affixes do not delete a preceding consonant (they may cause partial or complete assimilation).

Classes of affixes in Inuktut

As we have observed, all CC-initial affixes are necessarily deleting.

However, C-initial affixes can be deleting or adjoining.

The distinction between them has to be marked in the grammar somehow.

(10) Deleting and adjoining affixes in Inuktut

a. Deleting affixes	b. Adjoining affixes
CC-initial	—
C-initial	C-initial

Classes of affixes in Labrador

In Labrador, the affix classes are simpler:

- The category of deleting affixes no longer exists, as there are no final Cs to delete.
- This leaves a simple distinction between CC- and C-initial affixes. Some examples of the latter are given below.

(11) Some C-initial affixes in Labrador Inuttitut

a. qai-guma-vuk ‘He wants to come.’
come-want-INDIC.3S

b. pisu-tuinnat-tuk ‘He only walks.’
walk-only-PART.3S

c. anugi-vallia-juk ‘It is becoming windier.’
wind-more.and.more-PART.3S

5. The Law of Double Consonants

The Law of Double Consonants in Labrador

A complication in the –CC/-C distinction is introduced by the Law of Double Consonants, also known as Schneider's Law (SL), formulated by Smith (1978) as follows:

V C C V (V) C1 C2 V $\longrightarrow$ V C C V (V) C2 V

SL deletes the first consonant of a cluster when it follows another consonant cluster in the preceding syllable (see Dresher & Johns 1995 for discussion of SL in a number of dialects).

In an SL context an underlying CC-initial affix will lose its first C and appear to be C-initial.

The Law of Double Consonants in Labrador

SL explains one of the forms in (1b) that appears anomalous.

In 'it is cold', the morpheme /-nna/ appears with only one *n;* this is because it follows the cluster /ll/, and is reduced by SL.

The rule applies from left to right; therefore, /-ttuk/ retains its *tt*.

Compare (12b) 'he doesn't arrive'. Here, there is no cluster in the root, so the geminate /-ŋŋi/ remains and causes the *tt* of /-ttuk/ to simplify; see Nicoll (2019) for discussion.

(12) The Law of Double Consonants

a.	/nilli-nna-ttuk/	⟶	nilli-na-ttuk	'It is cold.'
b.	/tiki-ŋŋi-ttuk/	⟶	tiki-ŋŋi-tuk	'He doesn't arrive.'

6. Conclusions

Conclusions

We have argued that the extensive regressive consonant assimilation that characterizes Labrador Inuttitut has contributed to the regularization of the morphology of roots and affixes.

The old distinction between vowel-final and consonant-final roots have been leveled so that all roots are now vowel final.

In a related change, many C-initial affixes that used to be sensitive to whether a root was V- or C-final have now been reanlyzed to begin with CC.

Conclusions

As a by-product, the old distinction between C-adjoining and C-deleting affixes has been recast: as there are no root-final Cs to delete, the distinction is now between CC-initial and C-initial.

Fortescue (1992) has called attention to the role of morpho-phonological alternations in aiding the learnability of morphemes in a polysynthetic language.

It may be frutiful to consider the effects of the Labrador changes in this respect, and also in the light of Trubetzoy's (1939) discussion of 'boundary signals' *(Grenzsignale*).

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