

The search for regularity in irregularity

Defectiveness and its implications

Marianne Mithun

University of California, Santa Barbara

mithun@linguistics.ucsb.edu

1. Some issues

1.1. One current assumption

Irregular inflectional formations are stored.

Regular ones are formed online by rule.

Inflectionally rich languages

should demonstrate this principle the best.

So many inflected forms are possible
speakers could not possibly remember them.

Does more extensive inflectional morphology
correlate with less defectiveness?

1.2. Methodological issues

We seldom see defectiveness in normal speech.

(Russian victorious speaker notwithstanding)

Speakers simply use alternative expressions.

Effects: suppletion and syncretism

We are left with elicitation of paradigms.

Effects: grumpy and muddled speakers

1.3. Generality issues

In the absence of codified standards
do speakers vary?

Is the variation interesting?

1.4. Analytical issues

The search for defectiveness
can be the antithesis of our normal work.

We normally search for organizing principles
and generalizations.

Apparent defectiveness
might be a missed generalization.

Mass nouns have no plural forms.
Stative verbs might lack perfective forms.

Do two gaps of the same type constitute a pattern
but still count as defectiveness?

Higher-level generalizations

Where do gaps occur?

Sources of gaps

Phonological incompatibility

Semantic incompatibility

Effects of gaps

Suppletion

Syncretism

2. Central Alaskan Yup'ik

Eskimo-Aleut Family

Yup'ik noun inflection

Number SG, DU, PL

Case ABSOLUTIVE, ERGATIVE, LOCATIVE,
ABLATIVE, TERMINALIS, VIALIS, AEQUALIS

Possession

transitive suffix: possessor/possessed

'my shoes' = shoe-1SG/(3)DU

Resources

Speakers from Bethel, Alaska

Jacobson, Steven 1984. *Yup'ik Eskimo dictionary*. Fairbanks: Alaska Native Language Center.

Jacobson, Steven 1995. *A practical grammar of the Central Alaskan Yup'ik Eskimo language*. Fairbanks: Alaska Native Language Center.

Central Alaskan Yup'ik Noun Inflection

nuna 'land, village, country'

Possession marked by transitive suffix: 'my shoes' = shoe-1SG/(3)DU
 Case: Terminalis 'up to', Vialis 'through, by means of', Aequalis 'as, like'
 3R = coreferential third person: 'his/her/their own land'
 Extensive but regular phonologically-based allomorphy: 13 patterns

	POSSESSED→	SG	DU	PL
ABSOLUTIVE	POSSESSOR↓	<i>nuna</i>	<i>nunak</i>	<i>nunat</i>
	1SG	<i>nunaka</i>	<i>nunagka</i>	<i>nunanka</i>
	2SG	<i>nunan</i>	<i>nunagken</i>	<i>nunaten</i>
	3SG	<i>nunii</i>	<i>nunak</i>	<i>nunai</i>
	3RSG	<i>nunani</i>	<i>nunagni</i>	<i>nunani</i>
	1DU	<i>nunavuk</i>	<i>nunagpuk</i>	<i>nunapuk</i>
	2DU	<i>nunasek</i>	<i>nunagtek</i>	<i>nunatek</i>
	3DU	<i>nunagak</i>	<i>nunagkek</i>	<i>nunakek</i>
	3RDU	<i>nunasek</i>	<i>nunagtek</i>	<i>nunatek</i>
	1PL	<i>nunavut</i>	<i>nunagput</i>	<i>nunaput</i>
	2PL	<i>nunasi</i>	<i>nunagci</i>	<i>nunaci</i>
	3PL	<i>nunangat</i>	<i>nunagket</i>	<i>nunait</i>
	3RPL	<i>nunaseng</i>	<i>nunagteng</i>	<i>nunateng</i>
ERGATIVE		<i>nunam</i>	<i>nunak</i>	<i>nunat</i>
	1SG	<i>nunama</i>	<i>nunagma</i>	<i>nunama</i>
	2SG	<i>nunavet</i>	<i>nunagpet</i>	<i>nunavet</i>
	3SG	<i>nunaan</i>	<i>nunagken</i>	<i>nunain</i>
	3RSG	<i>nunami</i>	<i>nunagmi</i>	<i>nunami</i>
	1DU	<i>nunamegnuk</i>	<i>nunamegnuk</i>	<i>nunamegnuk</i>
	2DU	<i>nunavtek</i>	<i>nunagpetek</i>	<i>nunavtek</i>
	3DU	<i>nunaaagnek</i>	<i>nunagkenka</i>	<i>nunakenka</i>
	3RDU	<i>nunamek</i>	<i>nunagmek</i>	<i>nunamek</i>
	1PL	<i>nunamta</i>	<i>nunagemta</i>	<i>nunamta</i>
	2PL	<i>nunavci</i>	<i>nunagpeci</i>	<i>nunavci</i>
	3PL	<i>nunaata</i>	<i>nunagketa</i>	<i>nunaita</i>
	3RPL	<i>nunameng</i>	<i>nunagmeng</i>	<i>nunameng</i>
LOCATIVE		<i>nunami</i>	<i>nunagni</i>	<i>nunani</i>
	1SG	<i>nunamni</i>	<i>nunagemni</i>	<i>nunamni</i>
	2SG	<i>nunavni</i>	<i>nunagemni</i>	<i>nunavni</i>
	3SG	<i>nunaani</i>	<i>nunagkeni</i>	<i>nunaini</i>
	3RSG	<i>nunamni</i>	<i>nunagmini</i>	<i>nunamni</i>
	1DU	<i>nunamegni</i>	<i>nunagemgni</i>	<i>nunamegni</i>
	2DU	<i>nunavtegni</i>	<i>nunagpetegni</i>	<i>nunavtegni</i>
	3DU	<i>nunaaagni</i>	<i>nunagkegni</i>	<i>nunakegni</i>
	3RDU	<i>nunamegni</i>	<i>nunagemgni</i>	<i>nunamegni</i>
	1PL	<i>nunamteni</i>	<i>nunagemteni</i>	<i>nunamteni</i>
	2PL	<i>nunavceni</i>	<i>nunagpeceni</i>	<i>nunavceni</i>
	3PL	<i>nunaatni</i>	<i>nunagketni</i>	<i>nunaitni</i>
	3RPL	<i>nunameggni</i>	<i>nunagemggni</i>	<i>nunameggni</i>

ABLATIVE		<i>nunamnek</i>	<i>nunagnek</i>	<i>nunanek</i>
	1SG	<i>nunamnek</i>	<i>nunagemnek</i>	<i>nunamnek</i>
	2SG	<i>nunavnek</i>	<i>nunagemnek</i>	<i>nunavcenek</i>
	3SG	<i>nunaaanek</i>	<i>nunagkenek</i>	<i>nunainek</i>
	3RSG	<i>nunamnek</i>	<i>nunagminek</i>	<i>nunamnek</i>
	1DU	<i>nunamegnek</i>	<i>nunagmegnek</i>	<i>nunamegnek</i>
	2DU	<i>nunavtegnek</i>	<i>nunagpetegnek</i>	<i>nunavtegnek</i>
	3DU	<i>nunaaagnek</i>	<i>nunagkegnek</i>	<i>nunakegnek</i>
	3RDU	<i>nunamegnek</i>	<i>nunagmegnek</i>	<i>nunamegnek</i>
	1PL	<i>nunametenek</i>	<i>nunagemtenek</i>	<i>nunamtenek</i>
	2PL	<i>nunavcenek</i>	<i>nunagpecenek</i>	<i>nunavcenek</i>
	3PL	<i>nunaaatnek</i>	<i>nunagketnek</i>	<i>nunaitnek</i>
	3RPL	<i>nunameggnek</i>	<i>nunagemggnek</i>	<i>nunameggnek</i>
TERMINALIS		<i>nunamun</i>	<i>nunagnun</i>	<i>nunamun</i>
	1SG	<i>nunammun</i>	<i>nunagemmun</i>	<i>nunammun</i>
	2SG	<i>nunavmun</i>	<i>nunagemmun</i>	<i>nunavcenun</i>
	3SG	<i>nunaaanun</i>	<i>nunagkenun</i>	<i>nunainun</i>
	3RSG	<i>nunammun</i>	<i>nunagminun</i>	<i>nunammun</i>
	1DU	<i>nunamegnun</i>	<i>nunagmegnun</i>	<i>nunamegnun</i>
	2DU	<i>nunavtegnun</i>	<i>nunagpetegnun</i>	<i>nunavtegnun</i>
	3DU	<i>nunaaagnun</i>	<i>nunagkegnun</i>	<i>nunakegnun</i>
	3RDU	<i>nunamegnun</i>	<i>nunagmegnun</i>	<i>nunamegnun</i>
	1PL	<i>nunametenun</i>	<i>nunagemlenun</i>	<i>nunamtenun</i>
	2PL	<i>nunavcenun</i>	<i>nunagpecenun</i>	<i>nunavcenin</i>
	3PL	<i>nunaaatnun</i>	<i>nunagketnun</i>	<i>nunaitnun</i>
	3RPL	<i>nunameggmun</i>	<i>nunagmeggnun</i>	<i>nunameggmun</i>
VIALIS		<i>nunakun</i>	<i>nunagnegun</i>	<i>nunatgun</i>
	1SG	<i>nunamkun</i>	<i>nunagemkun</i>	<i>nunamkun</i>
	2SG	<i>nunavkun</i>	<i>nunagpegun</i>	<i>nunavkun</i>
	3SG	<i>nunaaakun</i>	<i>nunagkenkun</i>	<i>nunainek</i>
	3RSG	<i>nunamikun</i>	<i>nunagmikun</i>	<i>nunamikun</i>
	1DU	<i>nunamegnegun</i>	<i>nunagmegnegun</i>	<i>nunamegnegun</i>
	2DU	<i>nunavtegnegun</i>	<i>nunagpetegnegun</i>	<i>nunavtegnegun</i>
	3DU	<i>nunaaagnegun</i>	<i>nunagkegnegun</i>	<i>nunakegnegun</i>
	3RDU	<i>nunamegnegun</i>	<i>nunagmegnegun</i>	<i>nunamegnegun</i>
	1PL	<i>nunamteggun</i>	<i>nunagemteggun</i>	<i>nunamteggun</i>
	2PL	<i>nunavcetgun</i>	<i>nunagpecetgun</i>	<i>nunavcetgun</i>
	3PL	<i>nunaaatgun</i>	<i>nunagketgun</i>	<i>nunaitgun</i>
	3RPL	<i>nunamegteggun</i>	<i>nunagmegteggun</i>	<i>nunamegteggun</i>
AEQUALIS		<i>nunatun</i>	<i>nunagtun</i>	<i>nunacetun</i>
	1SG	<i>nunamtun</i>	<i>nunagemtun</i>	<i>nunamtun</i>
	2SG	<i>nunavtun</i>	<i>nunagpetun</i>	<i>nunavtun</i>
	3SG	<i>nunaatun</i>	<i>nunagketun</i>	<i>nunaitun</i>
	3RSG	<i>nunamitun</i>	<i>nunagmitun</i>	<i>nunamitun</i>
	1DU	<i>nunamegtun</i>	<i>nunagmegtun</i>	<i>nunamegtun</i>
	2DU	<i>nunavtegtun</i>	<i>nunagpetegtun</i>	<i>nunavtegtun</i>
	3DU	<i>nunaaagtun</i>	<i>nunagkegtun</i>	<i>nunakegtun</i>
	3RDU	<i>nunamegtun</i>	<i>nunagmegtun</i>	<i>nunamegtun</i>
	1PL	<i>nunamcetun</i>	<i>nunagkecetun</i>	<i>nunamcetun</i>
	2PL	<i>nunavcetun</i>	<i>nunagpecetun</i>	<i>nunavcetun</i>
	3PL	<i>nunaaacetun</i>	<i>nunagkecetun</i>	<i>nunaaacetun</i>
	3RPL	<i>nunamegtun</i>	<i>nunagmegtun</i>	<i>nunamegtun</i>

2.1. Differential recall under elicitation

kalikaq ‘paper’

From Russian via Chukchi, Koryak, or Kamchadal
Chukchi *kelikel*

Jacobson, Steven 1984. *Yup'ik Eskimo dictionary*.
Fairbanks: Alaska Native Language Center.182

Basic absolutes

<i>kalikaq</i>	‘paper’	ok
<i>kalikak</i>	‘two sheets of paper’	ok
<i>kalikat</i>	‘three or more sheets of paper’	ok

Singular Possessors

1SG

<i>kalikaqa</i>	‘my paper’	ok
---	‘my two papers’	?
<i>kalikanka</i>	‘my (PL) papers’	ok

Speaker:

“My two. That’s hard. It just jumps to plural.
There is no dual.”

Unhappy proposal

<i>kalika<u>nka</u></i>	<i>malruk</i>	1SG/PL
kalika- <u>nka</u>	malruk	
paper-1SG/ <u>PL</u>	two	
'my two papers'		

2SG

<i>kalikan</i>	‘your paper’	ok
<i>kalikagken</i>	‘your two papers’	ok
<i>kalikaten</i>	‘your papers (PL)’	ok

3SG

<i>kalikaa</i>	‘his/her paper’	ok
----	‘his/her two papers’	?
<i>kalikai</i>	‘his/her papers (PL)’	ok

Speaker:

“I can’t think of the dual if there is one.
I’m sure there must be.
It’ll come to me later.”

Dual possessors

1DU

<i>kalikapuk</i>	‘our paper’	ok
<i>kalikagput</i>	‘our two papers’	ok
<i>kalikaput</i>	‘our (PL) papers’	ok

2DU

<i>kalikakagtek</i>	‘your paper’	ok
<i>kalikagtek</i>	‘your two papers’	ok
<i>kalikatek</i>	‘your bunch of papers’	ok

3DU

<i>ingkuk kalikak</i>	‘their paper’	ok
<i>ingkuk kalikagket</i>	‘their two papers’	ok
<i>ingkuk kalikagket</i>	‘their (PL) papers’	ok

Plural possessors

1PL

kalipaput

‘our paper’

ok

kalikagput

‘our two papers’

ok

“Maybe this is wrong.”

kalikaput

‘our papers (PL)’

ok

2PL

kalikaci

‘your paper’

ok

‘**your two papers**’

?

kalikaci

‘your papers (PL)’

ok

3PL

<i>kalikat</i>	‘their paper’	ok
---	‘their two papers’	?
<i>kalikait</i>	‘their papers (PL)’	ok

Speaker:

“Can’t remember the one for their two papers,
if there is a term.”

Later suggested *kalikait* for this: ‘their (PL) papers (PL)’

So

Gaps for dual papers
for all possessors except dual possessors

But no trouble with

<i>nuliagka</i>	‘my two wives’
<i>nuliagken</i>	‘your two wives’
<i>nuliarak</i>	‘his two wives’

Memories of specific uses

nulianka ‘my wives’

Speaker:

“My grandfather said this because he had three different wives, at three different times.”

Methodological note

Providing paradigms is not what speakers normally do with their language.

Elicitation can create artificial difficulties.

Implications

Inflection is more than applying rules.

Speakers produce some regular forms instantaneously

kalikat ‘three or more papers’

some by rule, then double check with success

kalikagken ‘your two papers’

some by rule, then double check with reservations

kalikagput ‘we all, our two papers’

kalikagtet (nonexistent)

know they remember no forms, try substitution

kalikanka ‘my papers’ in place of ‘my two papers’

Incipient syncretism

Note use of plural in place of dual forms.

2.2. Yup'ik number on nouns

SG	DU	PL	
<i>qayaq</i>	<i>qayak</i>	<i>qayat</i>	'kayak'
<i>arnaq</i>	<i>arnak</i>	<i>arnat</i>	'woman'
<i>kass'aq</i>	<i>kass'ak</i>	<i>kass'at</i>	'white person'
<i>kaviaq</i>	<i>kaviak</i>	<i>kaviat</i>	'fox'
<i>qaltaq</i>	<i>qaltak</i>	<i>qaltat</i>	'bucket'
<i>amiq</i>	<i>amiik</i>	<i>amiit</i>	'skin, pelt'
<i>mikelnguq</i>	<i>mikelnguuk</i>	<i>mikelnguut</i>	'child'
<i>nuna</i>	<i>nunak</i>	<i>nunat</i>	'land, village'
<i>agun</i>	<i>angutek</i>	<i>angutet</i>	'open canoe'
<i>minek</i>	<i>minek</i>	<i>minet</i>	'wake of fish, boat'

Robust: many nouns that are mass in English are count in Yup'ik

<i>uquq</i>	‘seal oil, now also general oil’
<i>uquk</i>	‘two seal pokes of oil’
<i>uqut</i>	‘three or more seal pokes of oil’
<i>meq</i>	‘fresh water’
<i>mer'ek</i>	‘two buckets/bottles of water’
<i>mer'et</i>	‘three or more buckets/bottles of water’

Obligatory number
on pronominal suffixes on verbs

*Amiirak*k

amiir-a-k

to.skin-TR.INDIC-3SG/3DU

‘She’s skinning the (two) rabbits.’

*maqaruak*k.

maqarua-k

snowshoe.hare-DU

2.2.1. Defectiveness

Dualia tantum

Qerrullik *ang'uk.*

qerrullii-k ange-u-k

trouser=DU be.big-INTR.INDICATIVE-3DU

‘The pants are big.’

(one pair)

Dualia tantum

ackiigka

tukniuk

ackii-gka

tukni-u-k

glasses-1SG/DU

be.strong-INTR.INDIC-3DU

‘My glasses are strong’

(From Russian *ochki*)

Pluralia tantum

inglernka

ingler-nka

bed-1SG/PL

‘my bed’

ingun ‘crosspiece on which

one sits in a boat, slat of bed’

Pluralia tantum

Niicugnissuutet

niite-yug-neq-i-cuun-et

hear-want-result-make-device-PL

‘Turn on the radio!’

kumareski!

kumarte-ki

ignite-OPT.2SG/3PL

2.2.2 Individual defectiveness

Excellent, fluent speaker

was asked pointblank for the word for ‘eye’.

Much hesitation

Finally uncertain guess with apologies: *iik*

Request of other family members,

also excellent speakers.

Similar uncertainties

Actual dictionary form (Jacobson 1984)

ii

Form tentatively supplied was a dual

iik

Why was this difficult?

Unpossessed singular almost never used

Volunteered standard possessed forms

iika ‘my eye’, *iigka* ‘my (two) eyes’

Alternative grammar

Root 'eye' more often serves as the base of a verb.

ii-lliqua

'I have sore/infected eyes'

-lliqe- 'have poor quality N'

ii-ngi'rtua

'I have something in my eye,
got injured in the eye'

-ngir- 'be injured in the N'

ii-ngirtuq

'he is snowblind'

-ngir- 'be deprived of N'

Implications

Speakers do more than inflect by rule.

They search memories for echo of the form.

Frequency matters.

2.2.3. Inflected forms as basis of further lexical items

Most common singular: *-q*

Majority of absolutive nouns end in *-q*.

Same form as third person singular absolutive pronominal suffix on verbs.

Often added to loans

kuskaq

‘domestic cat’
Russian *koshka*

cukunak/cukunaq

‘cast iron pot’
Russian *chugunok*

But some absolutive singulars end in *-k*.

Some directly related to verb stems
ending in *k/g*.

kevek ‘load’

keveg- ‘to lift’

Some contain suffixes ending in *-k*

tuntuvak

tuntu-vak

‘caribou-large’

‘moose’

Some duals heard so often
they are taken as the basic form.

evsaik/esvaik ‘female breast’

iguuk ‘testicle’

iik ‘eye’

Nunivak Island

Incipient syncretism

Some include sense of ‘two-ness’
accessible to speakers.

Nakacuk kevkartuq.

nakacuk kevkarte-u-q

bladder burst-INTRANSITIVE.INDICATIVE-3SG

‘The bladder burst.’

Explanation by speaker: “It’s because of the two tube-
like things coming up out of the top on each side.”

Some additional *-k* nouns

<i>akiuk</i>	‘echo’ (from <i>aki-</i> ‘reciprocate, answer back’)
<i>amlek</i>	‘crotch, area between legs’
<i>pupsuk</i>	‘pincer, pincher’,
<i>keluk</i>	‘stitch’
<i>iqsuk</i>	‘left hand, left foot’,
<i>iquk</i>	‘end’ (of object, time period, story), other end, tip’

3. Mohawk

Iroquoian family, northeastern North America

3.1. Pronominal prefixes

<i><u>kón</u>-hsere's</i>	' <u>I</u> am following <u>you</u> '
<i><u>khé</u>-hsere's</i>	' <u>I</u> am following <u>her</u> '
<i><u>ík</u>-hsere's</i>	' <u>I</u> am following <u>it</u> '
<i><u>rí</u>-hsere's</i>	' <u>I</u> am following <u>him</u> '
<i><u>ták</u>-hsere's</i>	' <u>You</u> are following <u>me</u> '
<i><u>wák</u>-hsere's</i>	' <u>It</u> is following <u>me</u> '
<i><u>iónk</u>-hsere's</i>	' <u>She</u> is following <u>me</u> '
<i><u>rák</u>-hsere's</i>	' <u>He</u> is following <u>me</u> '
	etc.

Mohawk Transitive Pronominal Prefixes

Basic Forms

		PATIENTS													
		1SG	1DU	1PL	2SG	2DU	2PL	Ø	N	FZ.SG	M.SG	M.DP	FI	FZ.DP	
AGENTS	1SG				<i>kon-</i>			<i>k-</i>			<i>-hri-</i>			<i>khe-</i>	
	1.EXC.DU					<i>keni-</i>		<i>iakeni-</i>			<i>-hshakeni-</i>				
	1.EXC.PL						<i>kwa-</i>	<i>iakw-</i>			<i>-hshakwa-</i>			<i>iakhi-</i>	
	1.INC.DU							<i>-eteni-</i>			<i>(eh)tshiteni-</i>				
	1.INC.PL							<i>-etewa-</i>			<i>(eh)tshitewa-</i>			<i>iethi-</i>	
	2SG	<i>tak-/hsk-</i>							<i>-hs-</i>			<i>(eh)tsh-</i>			<i>-hshe</i>
	2DU		<i>takeni-/hskeni-</i>	<i>takwa-/</i>					<i>-eseni-</i>			<i>(eh)tshiseni-</i>			
	2PL			<i>-hskwa-</i>					<i>-esewa-</i>			<i>(eh)tshisewa-</i>			<i>ietshi-</i>
	Ø									<i>io-</i>					
	N	<i>wak-</i>	<i>ionkeni-</i>	<i>ionkwa-</i>	<i>-esa-</i>	<i>-eseni-</i>	<i>-esewa-</i>				<i>-hro-</i>		<i>-hroti-</i>	<i>iako-</i>	<i>ioti-</i>
	FZ.SG							<i>ka/w-</i>							
	M.SG	<i>-hrak-</i>	<i>-hshonkeni-</i>	<i>-hshonkwa-</i>	<i>-hia-</i>	<i>(eh)tshiseni-</i>	<i>(eh)tshisewa-</i>	<i>-hra-</i>							<i>-hshako-</i>
	M.DU							<i>-hni-</i>					<i>-hshakoti-/</i>	<i>-hshakoti-</i>	<i>-hshakoti-/</i>
	M.PL							<i>-hrati</i>					<i>-hronwati-</i>	<i>-hronwati-</i>	<i>konwati-</i>
FI	<i>ionk-</i>		<i>ionkhi-</i>	<i>iesa-</i>		<i>ietshi-</i>	<i>ie-</i>	<i>konwa-</i>		<i>-hronwa-</i>		<i>-hronwati-</i>	<i>iontat-</i>	<i>konwati-</i>	
FZ.DU							<i>keni</i>					<i>-hronwati-/</i>	<i>iakoti-</i>	<i>konwati-/</i>	
FZ.PL							<i>konti-</i>					<i>iakoti-</i>		<i>iakoti-</i>	

1 FIRST PERSON (*I, we*)

2 SECOND PERSON (*you*)

M MASCULINE (*he, they*: males or mixed group)

FI FEMININE-INDEFINITE (*one, she*)

N NEUTER (*it, she*: objects, animals, some women)

EX EXCLUSIVE (excludes hearer)

IN INCLUSIVE (includes hearer)

DU DUAL (two)

PL PLURAL (three or more)

FZ FEMININE-ZOIC (women, animals)

Extensive phonologically-conditioned allomorphy according to preceding and following sounds.

Obligatory and Inflectional

But surprises

k-attókha'

'I am wise'

s-attókha'

'you are wise'

ion-tókha'

'she is wise'

r-attókha'

'he is wise, **miserly**'

Negation

Iah tehattókha’.

iah te-ha-at-tok-ha’

not NEG-M.SG.AGT-MIDDLE-be.wise-HABITUAL

‘He made a foolish mistake, didn’t use his head.’

Iah teionttókha’.

iah te-iaw-at-tok-ha’

not NEG-M.SG.AGT-MIDDLE-be.wise-HABITUAL

‘She is a loose woman.’

Implication

Speakers remember full forms
complete with pronominal prefixes and negation.

They know special meanings
of inflected forms.

3.2. Mohawk kinship terms

Most Mohawk words are verbs.

teiakonia'tawèn:'eks 'chokecherry'

'it strikes one's throat'

Kinship terms are also morphological verbs.

Senior kinsman as pronominal agent
Junior kinsman as pronominal patient

rakhsótha

rak-hsot=ha

MSG/1SG-be.grandparent.to=DIMINUTIVE

‘he is grandparent to me’ = ‘my grandfather’

rake-’níha

‘he is father to me’ = ‘my father’

rake-nonhà:’a

‘he is uncle to me’ = ‘my uncle’

rak-htsi:’a

‘he is older sibling to me’ =
‘my older brother’

Which is the referent?

Different verb stems

for reference to senior and junior relatives

-hsot ‘be grandparent to’ SENIOR

-atere ‘have as grandchild’ JUNIOR

rakhsótha ‘he is grandparent to me’ = ‘my grandfather’

riiaterè:’a ‘I have him as grandchild’ = ‘my grandson’

Junior kinsman

ri-’ken’=a

1SG/M.SG-have.as younger.sibling=DIM

‘I have him as younger sibling’ =

‘my younger brother’

ri-ièn:’a

‘I have him as offspring’ = ‘my son’

ri-ionhwatèn:’a

‘I have him as nephew’ = ‘my nephew’

rii-aterè:’a

‘I have him as grandchild’ = ‘my grandson’

Reciprocal relationships

iatiatate'kèn:'a

iaki-atate-'ken'=a

1.EXCL.DU-RFL-have.as.sibling=DIMINUTIVE

'we two have each other as siblings' =

'my sibling'

-hsot ‘be grandparent to’

<i>akhsótha</i>	‘my grandmother’	fz.sg/1sg
<i>sahsótha</i>	‘your grandmother’	fz.sg/2sg
<i>ohsótha</i>	‘her grandmother’	fz.sg/fz.sg
<i>akohsótha</i>	‘her grandmother’	fz.sg/fi
<i>rohsótha</i>	‘his grandmother’	fz.sg/m.sg
<i>onkenihsótha</i>	‘our grandmother’	fz.sg/1du
<i>senihsótha</i>	‘your grandmother’	fz.sg/2du
<i>ietshihsótha</i>	‘your grandmother’	fi/2dp
<i>onkwahsótha</i>	‘our grandmother’	fz.sg/1pl
<i>sewahsótha</i>	‘your grandmother’	fz.sg/2pl
<i>ietshihsótha</i>	‘your grandmother’	fi/2dp
<i>otihsótha</i>	‘their (f) grandmother’	fz.sg/fz.dp
----	‘their (m, m+f) grandmother’	fz.sg/m.dp

-hsot ‘be grandparent to’

<i>rakhsótha</i>	‘my grandfather’	m.sg/1sg
<i>iahsótha</i>	‘your grandfather’	m.sg/2sg
<i>rohsótha</i>	‘her grandfather’	m.sg/fz.sg
<i>rohsótha</i>	‘his grandfather’	m.sg/m.sg
<i>shonkenihsótha</i>	‘our grandfather’	m.sg/1du
<i>tshisenihsótha</i>	‘your grandfather’	m.sg/2du
<i>shonkwahsótha</i>	‘our grandfather’	m.sg/1pl
<i>tshisewahsótha</i>	‘your grandfather’	m.sg/2pl
---	‘their (m, m+f) gfather’	m.sg/3dp
<i>iethihsótha</i>	‘we are their gparents’	1.inc.dp/3dp

Defectiveness

‘Their (males or mixed) grandmother’

Expected **rotihsótha*

‘she is grandparent to them’

FZ.SG/M.DP

Use *ronwanaterè:’a*

‘she has them as grandchildren’

FI/M.DP

‘Their grandfather’

Expected **shakohsótha*

‘he is grandparent to them’

M.SG/3DP

Use *shakoterè:’a*

‘he has them as grandchildren’

M.SG/3DP

Speaker observation

akohsótha ‘her grandmother’ FZ.SG/FI

“I’ve heard this but it sounds very odd.”

Two Mohawk genders for women

Original: Feminine/Zoic FZ

Innovation: Feminine/Indefinite FI

Core kinship terms contain only FZ forms.

ohsótha

o-hsot=ha

FZ.SG/FZ.SG-be.grandparent.to=DIMINUTIVE

‘her grandmother’

Even though only FI pronominal prefixes are used for grandmothers on verbs.

Implications

Pronominal prefixes on kinship terms

must be inflectional.

They are obligatory.

But speakers clearly remember the terms

as wholes.

Speaker differences

Less frequent kinship terms

Forms used by some are flatly rejected by others
though consistent with existing patterns

‘their (M) mothers’

ronwati’nisténha

FZ.DP/M.DP

‘they are mothers to them’

ronwatiien’okòn:’a

FZ.DP/M.DP

‘they have them variously as offspring’

‘their (F) mothers’

ontate'nisten'okòn:'a

FI/FI

‘they (FI) are mothers to them (FI)’

konwati'nisténha

FZ.DP/FZ.DP

‘they (FZ) have them (FZ) as offspring’

4. Conclusion

4.1. Yup'ik and Mohawk

Evidence reveals both memory and analogy
at work in inflection.

Evidence of rules or analogy

Speakers create new inflected forms.

Multiple Mohawk kinship terms

Evidence of memory

Speakers note gaps for regular formations

Yup'ik dual forms for 'papers'

Speakers reject regular formations

Mohawk kinship terms

Balance affected by frequency

Yup'ik 'eye' versus 'paper'

Bybee, Joan. 1985. *Morphology*. Amsterdam: John Benjamins.

Bybee, Joan and Paul Hopper, eds. 2001. *Frequency and the emergence of linguistic structure*. Amsterdam: John Benjamins.

a. Most frequent inflected forms

Retrieved from storage immediately,
whether irregular or not

Yup'ik 'my two wives' vs 'my two papers'

Frequency thus protects irregularity.

Lexicalization of Mohawk zoic kinship terms

Memorized forms still subject to reanalysis

Yup'ik dual 'eye', 'bladder'

b. Less frequent inflected forms

Sometimes produced by analogy
then checked against memory.

Yup'ik 'my three wives'
"said by my grandfather"

Speakers comment on special meanings,
even with formal regularity.

Mohawk 'she is a loose woman'

c. Infrequent inflected forms

Produced by analogy in various ways,
so the system is productive

but speakers still check and potentially reject.

Mohawk peripheral kinship terms:
numerous competing constructions

4.2. Rich inflection and defectiveness

Do languages with rich inflection
show less storage and fewer gaps?

More inflection means more inflected words.

Too much to remember?

Morphology versus syntax

More inflection can mean less syntax.

Possession by affixes
rather than independent pronouns

Argument reference by affixes
rather than independent pronouns

Words and sentences

Speakers know about collocations in both.

But words have tighter conceptual unity.

They are more routinized.

Speakers are less aware of their parts.

Speakers reject regular morphological formations more often than syntactic ones.

How can this be if there is too much to know?

Strong structure

Rich morphological systems are highly structured.

Speakers are good at learning patterns.

Knowing the patterns takes a burden off of memory.

Learning a new regularly patterned form is less taxing than a brand new word.

Strong regular structure also facilitates innovation by analogy.

Linguistic theory
has traditionally underestimated memory.

Attention to defectiveness
may raise appreciation of what speakers know.