

MARIA, SNOW, ANNA, AINO, KEKTÄKUUTI, ESRA

MINÄNKÄLE

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1

Introduction

This is a language with all of the things in it that we like. Here's a list of things we like that are in this language:

- Proto-Uralic and its descendants
- Feeling like we're foxes
- Feeling like Siberia never got colonized by the Russians or invaded by the Mongols
- Yukaghir and Eskimo-Aleut loanwords
- Loanwords from famous literary and scientific languages for science stuff
- Loanwords from words we know (mainly Hungarian and English ones) for modern stuff
- Senary
- Austronesian alignment
- Not having to use case markers
- Case markers
- Octal
- Derivational morphology
- Uvular phonemes
- Evidentials
- Not marking tense but having endless aspects
- Moods but actually it's more derivational morphology
- Decimal
- Hundreds of pronouns

- Not having to distinguish number
- Phonologies with small syllables
- Vowel harmony
- Phonemic vowel length
- Phonemic nasalization, but we only like it a little so it's rare
- Mixed-base hexadecimal/base-64
- Using the same construction for adjectives, participles, and relative clauses
- Verb serialization
- Conlanging

Here's a list of things we like that are *not* in this language:

- Syllabic consonants
- Tones
- /ø/
- Overlong vowels and consonants
- Interesting letters and diacritics
- Weird number systems, such as p-adic or bijective ones
- Particles used for syntax
- Free word order
- A practical, unique writing system (it separately has a practical one and a unique one)

It's good and fun. We'll probably use this for journal entries and poetry.

2

Phonology and orthography

2.1 Inventory and allophony

2.1.1 Consonants

Labial	Alveolar	Postalveolar	Prepalatal	Velar
m	n		ɲ ⟨ń⟩	ŋ
p	t	ɬ̪ ⟨č⟩	ɕ̪ ⟨ć⟩	k
	s	ʃ ⟨š⟩	(ç) ⟨ś⟩	
w	ɸ l r ⟨d l r⟩		ɸʲ j ⟨đ j⟩	ɣ ~ ʉ ⟨g⟩

Minämkäle's consonants don't change much based on where they are. The stops and affricates /p t ɬ̪ ɕ̪ k/ can occur as geminates anywhere in the middle of a word, but not at the edges. /ɣ/ is realized as [ʉ] between vowels and before consonants, and [ɣ] elsewhere. /ɕ̪/ becomes [ç] at the end of syllables, where it's spelled ⟨ś⟩. Between vowels, it wavers between either, as [ɕ̪ ~ ç], and is still spelled ⟨ć⟩.

2.1.2 Vowels

Minämkäle has a system of eight vowels in the first syllable of a stem, and only two vowels elsewhere. The initial vowel /a/ is realized as [ɑ]. The non-initial open vowel /a/ is realized as [æ] ⟨ä⟩ in stems that begin with one of /i y e æ/, and [ɑ] ⟨a⟩ otherwise (i.e. in stems that begin with /u ɣ o ɑ/).

There are certain stems that begin with /i/ as the first vowel, but have [ɑ] for their second vowel, and thus for all subsequent instances of /a/. Thus, there are really *two* /i/ phonemes: /i₁/, after which /a/ is realized as [æ], and /i₂/, after which it is realized as [ɑ]. The Latin and Cyrillic orthographies distinguish these indirectly by notating the difference between non-initial [æ] and [ɑ], while the Inuktitut syllabics orthography does not distinguish the two. /i₂/ is rare in native roots, but overwhelmingly common in loanwords from languages that do not have [æ], such as *ipsegewlewgeja*, from Latin *psychologia*.

i y	⟨i ü⟩	u
e		ɣ o ⟨ë o⟩
æ	⟨ä⟩	ɑ ⟨a⟩
Initial vowels		
<hr/>		
ə	⟨e⟩	
a	⟨ä/a⟩	
Non-initial vowels		

2.2 Phonotactics

Minänkäle has four kinds of syllables, each with different rules: stem-initial syllables, non-initial stem syllables, stem-final syllables with consonant suffixes, and suffix syllables.

Stem-initial syllables are of the form (C)V(C). The initial consonant, if present, may be any of Minänkäle's consonants, apart from *d*, *g*, *ŋ*, and *r*. (It can't be *ś*, either, since that's just *č* at the end of a syllable.) The vowel can be any of the eight different stem-initial vowels discussed above (§2.1.2). The final consonant can be anything, so long as it forms a legal consonant cluster with the next consonant.

Non-initial stem syllables are of the form CV(C), or just CV(w) if they are stem-final (which they usually are). In either case, the beginning consonant may be anything, and in the non-stem-final case, so may the ending consonant.

Stem-final syllables with consonant suffixes are similar, but they can only end in a limited set of consonants.

• (l){C, P:}	C	consonant
• C{t, ts̄, tʃ̄, tɕ̄, r}	V	vowel
• {p, k, N}{F, l, ɭ}	N	m, n, ɳ, ŋ
• {N _h , F}P	N _h	homorganic nasal
• Fw	P	p, t, k, q
	J	w, l, ɭ, j, r, ɣ
	F	s, ʃ, ʒ, ɕ, ʈʃ, ʂ, ɣ
• {p, t, ts̄, tʃ̄, tɕ̄}{k, q}		

The differences between /n/ and /ɳ/, and between l and ɭ, are neutralized before {t, ts̄, tʃ̄, tɕ̄, r}, the preceding consonant assimilating to become homorganic.

In loanwords, Mitänkiele adds *i-* to initial consonant clusters, and *-e-* to break up illegal medial consonant clusters. Sequences of vowels are generally broken up with *-w-* and *-j-*, but some vowels are turned into approximants when legal and close enough, such as the *w* and *j* in *piwlewegeja* ['pi-wləwɛʒəjə] (< Latin *biologia*).

2.3 Sandhi

The main source of sandhi in Mitänkiele is the fact that it allows neither consecutive vowels nor glottal stops. Instead, when there are vowels on both sides of a word boundary, it inserts an epenthetic approximant. Before front vowels, this approximant is [j], and before back vowels, [w]. This causes the compound *mi-e*, for example, to be realized as [mí_jé]. (For a discussion of tone in compounds, see §2.4.4.)

2.4 Morphophonology

2.4.1 Prefixes

There are only three prefixes in Minänkäle: *mi-*, *ti-*, and *min-*.

2.4.2 Suffixes

Most of Mitänkiele's morphology is suffixing. There are three morphophonological processes concerning the addition of suffixes: vowel harmonic assimilation, final vowel elision, and intervocalic epenthesis. For vowel harmonic assimilation, once a suffix is attached, its vowels assimilate to the vowel harmony class of the root it's attached to. All prefixes in this grammar are given as their back vowel variants; to transform them into their front vowel variants, one simply applies the changes given to the right, for both the short and long variants of the vowels.

a	→ ä
o	→ e
u	→ ü
uo	→ ie

Harmony rules

Final vowel elision occurs to *-i*, and to *-o/e* in un-ablauted stems. It only occurs if the resulting combination is phonotactically permissible. Therefore, it always happens when the ending begins with a vowel: *suŋe-en* > *suŋen*. Conversely, it never happens when the final vowel is preceded by a consonant cluster, or if the suffix contains a consonant cluster, with one exception covered just below: *maidā-na* > *maidāna*, *suŋe-lsi* > *suŋelsi*. It also never occurs if it would create a final consonant cluster, meaning that it doesn't occur to consonant suffixes at all: *suŋe-n* > *suŋen*. In all other cases, one has to evaluate the potential consonant cluster for validity: *jomi-ta* > *jomta*, but *jomi-ka* > *jomika*.

In cases where the elision would create *-uwC* or *-ijC*, the approximant is vocalized: *puwi-na* > *puuna*, *kije-li* > *kiili*. Similarly, if it would double a consonant, then for consonants capable of becoming geminates (all but central approximants) become geminates, while other consonants lengthen the vowel behind them (if it isn't long already): *cele-le* > *celle*. This also applies in the case that one or both of the consonants are geminate: *čitti-ta* > *čittä*. This also creates the singular exception to the rule that roots in which the final vowel is preceded by a consonant cluster never experience elision: cases in which the ending can assimilate into a geminate with the last consonant of the cluster in the root, such as *čärke-ki* > *čärkki*.

The final process, intervocalic epenthesis, is much simpler. It concerns epenthetic consonants inserted when a suffix begins with a vowel, and the final vowel of the root can't elide. Which consonant is inserted depends entirely on the first vowel, i.e. the root's: if it is front, then *-j-* is inserted, and if it is back, then *-g-* is inserted, which is realized as [u] in this environment. Examples are *wülü-u* > *wülüjü*, *čaka-a* > *čakaga*, *kudu-en* > *kudugen*. Examples where the first vowel is front and the second vowel is back do not exist, since the only possible vowels in back vowel roots are *-i* or *-e*, which elide before suffixes that begin with vowels.

2.4.3 Prefixes

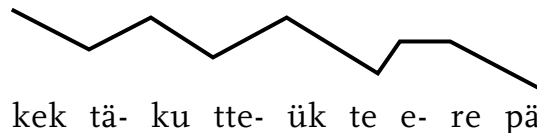
The application of prefixes are considerably more complicated than that of suffixes, because they can end in consonants, which may assimilate to the initial consonant of the root. The following rules apply in these situations, from greatest to least priority:

1. All phonotactically permissible combinations stay the same.
2. Doubled consonants other than /w j/ become geminates; the latter two just elide the prefix's coda altogether.
3. Anything impermissible before /w j/ elides, with the exception of nasals, which become *n*.
4. N_1N_2 becomes N_2 :
5. *kq* and *qk* assimilate to *q*; and *k*; respectively. Similarly, *tl* and *tl̥* become *l*; and *l̥*.
6. Fricatives preceded by /t/ or an affricate become geminate, and elide the preceding consonant.

If the prefix has an identifiable vowel harmony class (i.e. contains vowels other than *e* and *i*), then the entire root and any subsequent affixes assimilate to this class: *čäk-* + *tone* > *čäktene*.

2.4.4 Pitch accent in compounds

In hyphenated compounds, such as those formed with classifiers, modifying pronouns, and numerals, the individual elements within the compound are distinguished by pitch accent. After the first element of the compound, all subsequent elements start with roughly the same pitch as the first syllable of the first element, perhaps slightly lower. Additionally, in multisyllabic non-final elements, the last syllable gets a rising tone, to help meet the high tone that the next syllable begins with. For example, this is how the pitch melody of *kektä-kutte-ükte e-repä* 'thirteen of these foxes' is rendered:



This may be transcribed into IPA as [kêktä_kût:ě_jýktə é_répæ]. Note the falling tone on *kek* and *ku*; this happens in the first syllable of every polysyllabic non-final element.

2.5 Orthography

Given that acronyms are an occasional component of the language, letter names are worth clarifying. The names of the 27 letters of the Minänkäle alphabet, along with their ASCII representation if it differs, are:

A a	<i>a</i>	N n	<i>na</i>
Ä ä Ae ae	<i>ä</i>	Ńń Nj nj	<i>ńa</i>
Ć ć Cj cj	<i>ća</i>	Đ đ Ng ng	<i>naŋe</i> or <i>ŋa</i>
Č č Cz cz	<i>ča</i>	O o	<i>o</i>
D d	<i>ćade</i> or <i>da</i>	P p	<i>pa</i>
Đ đ Dj dj	<i>đa</i>	R r	<i>re</i>
E e	<i>e</i>	S s	<i>sa</i>
Ě ě Eo eo	<i>ě</i>	Ś ś Sj sj	<i>śa</i>
G g	<i>kimele</i> or <i>ga</i>	Š š Sz sz	<i>ša</i>
I i	<i>i</i>	T t	<i>ta</i>
J j	<i>je</i>	U u	<i>u</i>
K k	<i>ka</i>	Ů ů Ue ue	<i>ü</i>
L l	<i>le</i>	W w	<i>we</i>
M m	<i>ma</i>		

Apart from the above-mentioned graphemes and the behavior of the phonemes they represent, worth discussing is Minänkäle punctuation and typesetting. While loanwords are generally rendered phonetically, it is also acceptable to render them in their original spelling, in which case they are italicized unless they are a proper noun, and any appended prefixes or suffixes are connected with a colon. Acronyms likewise receive suffixes with a colon. Quotes are done with « and », and nested quotes are done with ‹ and ›. Punctuation does not change in quotations, affixes are added directly to them without any other indication, clitics are added to them via hyphens, and they do not change the following capitalization; in short, they act exactly like words. In ASCII, « and » are both replaced with ", and ‹ and › are both replaced with '. Hence:

«Älä pelemäni erqama SMS:da miŋ *auditorium:na*.» monije i mi Jonathan:ŋ.
 "Aelae pelemaeni erqama SMS:da ming *auditorium:na*." monije
 i mi Jonathan:ng.

“Don’t be afraid to send me an SMS at the auditorium,” I told Jonathan.

3

Basic syntax

Mitänkiele is a topic-prominent language with Austronesian alignment. That is, the focus and topic are distinguished, and the semantic roles of the participants in each clause are determined by a voice marked on the verb. Mitänkiele marks the focus by having it follow the verb. The other elements in the sentence are the topic, and more often than not follow the verb-focus complex. The first of these elements (the “primary topic”) is always assumed to be the actor, except for in actor focus constructions with transitive verbs, in which case it’s assumed to be the patient. The rest of the elements may relate to the verb in any of a number of ways: heir, friend, tool, end, place, beginning, why, what, and how. For each of these roles, there exists a case suffix that can optionally mark it explicitly, and a voice that marks the focus as such. The focus is never marked for case.

If a verb is unmarked for voice, it is considered part of the focus, and takes a default voice depending on the verb. Various types of verbs have various default voices; broadly, intransitive verbs have doer focus, and transitive verbs have victim focus. We can demonstrate intransitive verbs with *saŋća* ‘stand’:

- (1) a. *Saŋća repä maida.*
stand fox forest
‘The fox stands in the forest.’
b. *Maida saŋća repä.*
forest stand fox
id.

The doer must follow the verb, but other elements in the topic are permitted to move about. *maida* can be inferred to be locative from context, but it can also be marked explicitly:

- (2) *Sanċa repä maida -na.*
stand fox forest -LOC

‘The fox stands in a forest.’

The structure of individual elements is such that adjective-like forms always come first, followed by pronoun clitics, followed by the noun-like form, followed by the postposition, if any. Postpositions tend to agree with their objects in case, although this is not strictly necessary (see §??):

- (2) *Sanċa wire -pċi mi- repä lüpi -pċi maida -na keske -nä.*
stand blood -color 1= fox leaf -color forest -LOC center -LOC

‘I, the red fox, stand in the middle of a green forest.’

An analogous example for a transitive verb finds the patient as the focus, unless the doer focus suffix *-l* is applied to the verb:

- (3) a. *Wäpti nomali mi.*
catch prey rabbit 1

‘I catch the rabbit.’

- b. *Wäpti -l mi nomali.*
catch prey -DF 1 rabbit

‘I catch rabbits.’

Because *wäpti* is durative by default and *nomali* is not marked for number, the meaning of the sentence when *nomali* is not the focus shifts to the doer being generally involved in the catching of rabbits. There are various ways to make the action more specific; one way is to clarify the number of *nomali* as singular, or clarify it as definite with a pronoun:

- (4) a. *Wäpti -l mi ün- nemäli.*
catch prey -DF 1 SG- rabbit

‘I catch a rabbit.’

- b. *Wäpti -l mi e- nomali.*
catch prey -DF 1 the= rabbit

‘I catch the (recently referenced) rabbit.’

Another way is to change the aspect of the verb to pointive or flashitive, causing the action to become atomic instead of durative:

- (5) *Wäpti -ki -l mi nomali.*
catch prey -PNTV -DF 1 rabbit

‘I will catch a rabbit.’

Perfective items don't make much sense in the present, so in the default, nonpast tense, they are interpreted as future.

Returning to Ex. 1, we can demonstrate a similar effect with a place focus verb:

- (6) *Sanća -ńśi maida repä.*
stand -PF forest fox

'The fox stands in the forest.'

Note that it would be ungrammatical to use the locative case with *maida* here. The focus never takes cases.

If one wants to front the focus, then one can replace the segment after the verb with the dummy pronoun *i*, which indicates the introduction of a new focus, and put the focus before the verb. Since verb roots end in vowels, they usually acquire a voice suffix in this situation to disambiguate them from the *i*.

- (7) *Repä sanća -ć i maida.*
fox stand -DF this forest

'It is the fox who stands in a forest.'

In these sentences, everything preceding the verb is considered the focus.

3.1 *Linking*

3.2 *Verb serialization*

3.3 *The verbless interpretation*

4

Nouns and postpositions

4.1 Inflection

4.1.1 Number

-sa	singular
-ka	dual
-t/-ja-	plural
weń-	all

Numbers

4.1.2 Case

-m	subject (doer or victim)
-ń	heir
-s	friend
-č	tool
-da	start
-na	place
-ŋ	end
-š	reason
-nen	context

Cases

4.1.3 *Classifiers*

4.1.4 *Derivation*

-či	smol
-mi	a specific kind of
-mimi	favorite
-sta	a bunch of, the family of
-jka	a part of
-jkaikka	a fragment of
-liwiika	a container of
-kka	-ish, a ripoff of
-aši	hunter, herder, or farmer of
-ule	interval of, unit of
-ni	existence of

Noun-forming suffixes from finite roots

4.2 *Postpositions*

5

Verbs and adjectives

5.1 Mood

The most fundamental distinction made on finite verbs in Mitäńkiele is mood.

-Ø	is
-ne	might
-k	isn't

Moods

5.2 Focus

The focus of a finite verb's object is determined by its case ending. See §4.1.2 for an overview of what cases are available. It is essentially a transfer of the case ending of the object to that of the verb. The default focus for intransitive verbs is usually the doer, and for transitive verbs, the victim, but certain verbs have other default focuses; for example, *pele* 'fear' is, by default, start focus. In such situations, the kind of focus will be given in the lexicon as a smallcaps abbreviation, as it will appear in the gloss as well. (In the case of *pele*, this would be s f.)

5.3 Evidence

These evidentials occur exclusively after the "might" mood in *-ne*.

5.4 Non-finite forms in *-ma* and *-ni*

-ma	gerund
-(ma)ni	infinitive

Non-finite forms
säne 'play, be something that plays'
sänemä 'the state of playing'

Karma *säne mi*.

I want something that plays.

-ci	smell
-la	sight
-ku	hearing
-lu	touch, taste, other body sense
-ga	heard it from someone
-nu	heard it somewhere
-gu	a friend's opinion, not really mine
-ni	a stranger's opinion, not really mine
-ča	other declarative memory
-wa	other episodic memory
-ra	intuition, procedural memory
-tta	can't remember it properly
-me	best guess after thinking about it
-pi	can prove it

Evidentials

Karma sänemä mi.

I want the state of playing.

Karma sänemäni.

I want to play. *lit.* Playing is desirable.

üćä ‘small, be something that is small’

üćämä ‘the state of being small’

Karma üćä mi.

I want something small.

Karma üćämä mi.

I want the state of being small.

Karma üćämäni.

I want to be small. *lit.* Being small is desirable.

repä ‘fox, be a fox’

repämä ‘the state of being a fox’

Karma repä mi.

I want a fox.

Karma repämä mi.

I want the state of being a fox.

Karma repämäni.

I want to be a fox. *lit.* Being a fox is desirable.

But we can also apply *-ni* to bare stems, in which case the stem itself is interpreted as a state of being. To Mitänkiele speakers, this means that it is interpreted as, “the state of having ⟨original meaning⟩ exist for you”, or perhaps, “the state of experiencing the existence of ⟨original meaning⟩”. Thus:

Karma säneni.

I want to experience the existence of something that plays.

Karma üćäni.

I want to experience the existence of something small.

Karma repäni.

I want to experience the existence of a fox.

It is ambiguous whether “existence” here refers to the existence of a particular instance of the root, or the existence of *any* instances of the root within the universe at all, but the latter is a more likely interpretation, since the former is just an overly elaborate way of saying that you want an instance of the root.

5.5 *Auxiliary verbs*

5.5.1 *Taking both gerunds and infinitives*

e	doesn't
käske	(command)
älä	(neg. command)
??	let's
älwä	can
mačta	can physically
??	stop
??	be tired of
??	must
??	should
??	should (but isn't)
kelke	have to
??	intend
??	be good at

Auxiliary verbs that take both forms

5.5.2 *Taking only gerunds*

karma	want
soŋe	wish
äčä	like
pele	fear
näke	seem
tale	pretend
tulek	will in a moment
ešte	finish

Aux. verbs that only take gerunds

6

Verbal derivation

6.1 *Aspect-like*

6.1.1 *The “when” family*

-j	afteritive
-ši	right-afteritive
-ŋa	unfinished
-šte	finished
-l'	unstarted

“When” suffixes

6.1.2 *The “how long” family*

-ki	pointive
-nti	whilative
-tti	flashitive
-čma	just a little

“When” suffixes

6.1.3 *The “how much” family*

-ta	steady againative
-tata	again-and-againative
-tatta	random againative

“How much” suffixes

6.2 *Mood-like*

6.2.1 *The causative family*

-kči	can
-wje	good idea
-kta	make do
-ktokči	help with
-ktouje	allow
-wkada	made to do
-wkadokči	do with help
-wkadouje	be allowed to do
-wɲada	ask for
-wɲadokči	ask for help with
-wɲadouje	ask for permission for

Causative suffixes

6.2.2 *The tryative and oopsal family*

-kori	try
-lsokri	kinda try
-korikri	try a lot
-kuori	try at all costs
-ppa	try, but you can't do it
-pappa	try, but it ends badly
-ppappa	try, but the opposite happens
-jeppa	try to avoid it, but you can't

Tryative and oopsal affixes

6.2.3 *Other suffixes*

-mu	do a specific kind of
-la	unintentional
-wɲa	intentional
-lse	kindal
-pe	only, exactly
-mpa	in comparison
-lme	imagine doing
-ńše	commit to doing

Other mood-like suffixes

6.3 From other word classes

6.3.1 Verb-like compounds

-le	become
-we	be become
-oge	have (inal.)
-one	have (al.)
-tta	be missing
-rtta	have lost
-ri	do or make
-rwi	be done or made by
-rdi	make from
-rji	make into
-de	use
-dede	use up
-deede	misuse

Verb-like suffixes

6.3.2 Adjective-like compounds

-g/-gi-	partofitive
-n/-ni-	hasitive
-pči	colored like a
-pci	smells like a
-lta	shaped like a
-lča	feels like a
-lku	sounds like a
-dwe	works like a
-mda	moves like a
-ŋke	seems like a
-nole	is like a
-mta	I thought it was a

Adjective-like suffixes

7

Pronouns

7.1 Demonstrative

i	this (new topic)
u	this (new focus)
e	this (old topic)
o	this (old focus)
eje	this (older topic)
owo	this (older focus)
a	that (unmentioned topic)
awa	that (other unmentioned topic)

Demonstratives

w-	irrelevant, unreachable, nonexistent
uw-	nonexistent, impossible
j-	recently extant
d-	shortly extant
uj-	previously extant
un-	eventually extant

Hereiness prefixes

7.2 Personal

7.2.1 Non-*mi/ti*-compounding

mi	me, us
ti	you
čä	idea or method
čü	quality
ko	who
ku	what (creature)
mo	what (thing)
mu	what (time or place)
kođu	what (idea or method)
mođu	what (quality)

Non-compounding pps.

7.2.2 *mi/ti*-compounding

tä	person inside head
nä	person outside head
tü	people inside and outside head
čä	moving creature
čü	still creature
će/ći-	thing
ću	time or place

Compounding pps.

mi-	and me
ti-	which includes you
mit-	and me, which includes you

mi/ti prefixes

7.3 *Locative*

ši	inside me
sü	on me
šä	inside you
so	on you
ta	near me
na	near you
tu	near us
no	far but reachable
nu	unreachable

Locatives

8

Classifiers

8.1 Spatial classifiers

8.1.1 Shape

keerä	compact
šoorwa	spindly, spiky
soose	porous, web-like
liiwa	pile-like, sand-like
kuumi	flat surface
jaari	irregular surface
kaali	net-like
niide	rod-like
ñiiñsé	amorphous
piilwe	diffuse
aage	empty

Shape classifiers

8.1.2 *Orientation*

määte	point at s'th
keeske	point at center of s'th
kuutti	point supported by s'th
wiilä	top of, space above s'th
aala	bottom of, space below s'th
eede	front of, space in front of s'th
miigä	back of, space behind s'th
muuli	side of, space next to s'th
jootka	bulk of, space within s'th
kaalma	space just beneath surface of s'th
koomi	space incompletely enclosed by s'th
uumi	space completely enclosed by s'th

Orientation classifiers

8.2 *Creature classifiers*

8.2.1 *Organization*

núuli	decentralized, the same everywhere
kuuli	divided into just tissues
liinta	divided into compartments and organs
jääkälä	colony where everything stays where it is
kuuči	colony where the bits move on their own

Organization classifiers

8.2.2 *Adaptive trait*

ćoonča	armored
kaad'wa	furred
nooka	insulated from cold
ńoouņa	antifreeze
čeeči	buoyant
küüje	exchanges heat well

Adaptive trait classifiers

8.2.3 *Strategy*

jääwje	drifting
puuwi	staying rooted
luuppa	growing
kaala	searching
kuuli	parasitizing and killing
śuuśa	parasitizing and leaving alive
čaački	following
kooimi	following and helping

Strategy classifiers

8.3 *Sensory classifiers*

8.3.1 *Texture*

čääke	solid, hard, frozen
muura	crumbly
kiiči	soft like fresh snow
leeppi	soft like fur
ńäämi	soft like skin
jaami	soft like jelly
điimä	sticky, viscous
waańća	slushy
weete	still liquid
uuŋa	moving liquid
puurka	wispy like falling snow
küünti	wispy like smoke
sääŋe	airy, gaseous
waalki	radiant
eeŋwa	intangible, imaginary

Texture classifiers

8.3.2 *Smell*

kooje	masculine
niiṇṇā	feminine
jokse	in heat
naati	other body smell
kuuće	ammonia, urea, urine
siitta	skatole, scat
sääje	aliphatic amines, rot
aapte	dandruff, dust
čaawa	acetic acid
piiša	butyric acid
niime	lactic acid
jiimā	sugar, ripe fruit
kaaćki	alcohol, rotting fruit
kaača	turpentine, resin, wood
ćuuri	esters, flowers
kiide	pollen, spring
ńoori	tannins
čiiṇṇi	smoke
maage	geosmin, petrichor
waaške	organometallics
čooša	sulfur

Smell classifiers

8.4 *State classifiers*

8.4.1 *Quality*

8.4.2 *Degree*

9

Complex syntax

9.1 The differences between nominal classes

9.2 Connective infixes

Syntax		Moods	
Subord.	Coord.	Real–Real Unreal–Real	Real–Unreal Unreal–Unreal
-Ø-	-š-	X, (and) then Y if X, then Y	X so that Y if X, then Y should happen after it
-w-	-šu-	X, and also Y, X while Y if X, then also Y	X, intending Y if X, then Y should also happen with it
-j-	-ši-	let X, so that Y if X (but it's not), then Y	let X, so that Y can happen if X (but it's not), then Y can happen
-r-	-rči-	X, which explains Y if X, then it would explain Y	X, which might explain Y if X, then it might explain Y
-l-	-lči-	X, (and) then Y (which can't be while X) if X, then Y will stop	X so that Y doesn't happen either X, or Y
-k(o)-	-ško-	X, which is Y a hypothetical X which is Y	those Xes that are Y those hypothetical Xes that are Y

9.2.1 Purposive clauses

9.2.2 Relative and epistemic clauses

9.3 Modal particles and adverbs

9.3.1 Time particles

nüük 'already' (< FP)

taan 'now'

noon ‘in the future’

waaś ‘at first’ (< FV)

?? ‘ever, never’

9.3.2 *Epistemic particles*

määŋ ‘but’

9.3.3 *Other modal particles*

čaam ‘just, only’

kuuś ‘a lot’ (< Ug)

?? ‘somewhat, rather’

?? ‘(exclamation)’

?? ‘(question)’

9.3.4 *True adverbs*

šejää ~ šää ‘well’

10

Useful compounds

10.1 *Nouns from verbs*

-lu	-le-i	the start, or baby version of
-wu	-we-i	the end, or remains of
-lma	-l-ma	the before, or (singular) ingredients for
-jma	-j-ma	the after, or (singular) product of
-rjetku	-rje-tku	the (regular) ingredients for
-rdetku	-rde-tku	the (regular) product of using up
-rwetke	-rwe-tke	the (regular) product of, without using up
-jkasta	-jka-sta	the parts of
-jkaikkasta	-kajkka-sta	the fragmented remains of

Appendices

A

Core lexicon

A.1 Onomatopoeia

A.1.1 Nouns

ńääp(i) ‘duck noise, duck (informal)’ *ńuuu* ‘cat, cat noise’

ŋoŋo ‘goose noise, goose (informal)’

A.2 Uralic roots

A.2.1 Nouns

aŋe ‘space (all senses)’

aŋi ‘ptarmigan’

aŋti ‘horn’

apte ‘fur, hair’

arga ‘value’

arpa ‘device’

asuri ‘leader’ (< FU)

aške ‘footstep’

ate ‘thing, whatsit’

äimä ‘needle’

äli ‘sap’

ämpi ‘dog’ (< Ug)

äne ‘voice’

äŋe ‘world’ (< Smy *äŋ)

äŋi ‘chin, lower jaw’

äŋiči ‘raspberry’

äri ‘year I’

cäcäpä ‘someone who provides intimate emotional support’ (< Smy *cacäpä)

cämceje ‘frog’ (< Smy *cämcejə)

cärä ‘a round egg laid by an invertebrate’ (< Smy *carä)

cäre ‘the space under one’s chin’ (< Smy *cär)

cene ‘biological tissue of any kind’ (< Smy *cen)

ceŋke ‘epithelium’ (< Smy *ceŋkə)

cerke ‘the young of a non-canid animal’ (< Smy)

cuke ‘worm I’ (< Smy *cukə)

cüre ‘tool’ (< Smy *cürə)

ćaiwa ‘tail of canid’ (< Smy *t’ajwa)

ćaka ‘thin ice with water beneath’

ćäke ‘hard snow’

ćeŋi ‘time III’ (< Ug)

ćiklä ‘wart’

ćolme ‘knot, bunch, bundle’

ćonča ‘flea’

ćorki ‘blade’

ćouja ‘stomach’

ćugi ‘woodworm’

ćukki ‘summit’

ćumpi ‘s’t’h you can drink from’

ćuri ‘flower’ (< FU)

ćükčiteri ‘currant’ (< FV)

ćüŋci ‘passerine’

ćüŋi ‘knuckle’

ćüŋkä ‘hill’

čac̣ki ‘vulture’ (< FU)

čamče ‘layer of skin’

čänčä ‘back (of a vertebrate)’

čäčke ‘a few minutes’ (< FP)

čeči ‘duck’

čičä ‘sparrow’

čeŋke ‘fumes, exhaust, smog’

čeŋki ‘wedge, ramp’

čiŋi ‘smoke, smog’

čiwni ‘scent, smell’ (< FV)

čoči ‘s’t’h soft to lie on’

<i>čoša</i> ‘sulfur’ (< FP)	<i>kañci</i> ‘pintail duck’	<i>kilmä</i> ‘cold, biting wind’ (< FP)
<i>däppi</i> ‘spleen’	<i>kača</i> 1. ‘container’, 2. ‘resin’	<i>kipeñi</i> ‘spark’ (< FP)
<i>đimä</i> ‘glue’	<i>kađa</i> ‘ridge’	<i>koćmi</i> ‘onion, allium’ (< FU)
<i>đäjisi</i> ‘tree bark that has been used for s’t’h’	<i>kađwa</i> ‘weasel’	<i>kođwa</i> ‘a long while’ (< FV)
<i>đuome</i> ‘cherry’	<i>kaja</i> ‘celestial light’ (< Smy)	<i>koimi</i> ‘human’
<i>eñwa</i> ‘sleep, dream’ (< Smy)	<i>kajaka</i> ‘gull’	<i>koira</i> ‘smell usually associated with men’
<i>íce</i> ‘shadow, subconscious’	<i>kajare</i> ‘Northern lights, aurora’ (< Smy *kaja-rə)	<i>koiwa</i> ‘birch tree’
<i>ikeñe</i> ‘palate’	<i>kala</i> ‘fish’	<i>koje</i> 1. ‘sentient species’, 2. ‘dawn’
<i>ili</i> ‘evening’ (< FU)	<i>kali</i> ‘net’	<i>koji</i> ‘scoop, spoon’
<i>ilma</i> ‘daytime sky’	<i>kalke</i> ‘whisker’ (< FV)	<i>kolja</i> ‘evil spirit, demon, mental illness’ (< FU)
<i>imi</i> ‘female family member older than you’	<i>kałwi</i> ‘membrane’	<i>komta</i> ‘lid, cover’ (< FP)
<i>irkä</i> ‘boy’	<i>kama</i> ‘any protective covering of a mobile organism’	<i>koni</i> ‘lye’ (< FP)
<i>jaka</i> ‘part, piece’	<i>kanta</i> ‘load, weight, burden’	<i>konta</i> ‘fatigue, stillness, viscosity, lethargy’
<i>jakki</i> ‘pinewood’	<i>kañka</i> ‘dry, sandy place’ (< FU)	<i>kopa</i> ‘skin, bark’
<i>jalka</i> ‘paw, foot’	<i>kappi</i> ‘pine tree’ (< FU)	<i>kose</i> ‘spruce, fir’
<i>jami</i> ‘gel’	<i>karke</i> ‘crane’	<i>kota</i> ‘dwelling’
<i>jäje</i> ‘s’t’h thin supporting s’t’h heavy’	<i>kata</i> ‘throat’	<i>kuće</i> ‘urine’
<i>jäkälä</i> ‘lichen’ (< FP)	<i>kati</i> ‘pasture’	<i>kuči</i> ‘ant’
<i>jälke</i> ‘trail, track, sign’	<i>käči</i> ‘juniper’ (< FU)	<i>kudi</i> ‘(falling) precipitation’
<i>jälji</i> ‘base of tree’	<i>käji</i> ‘baby bird’	<i>kudu</i> ‘morning’
<i>jäme</i> ‘sea’ (< Smy *jäm)	<i>käli</i> 1. ‘string, twine’, 2. ‘marsh lake, muddy lake’ (< FU for 1.)	<i>kuđmi</i> ‘ash’
<i>jänte</i> ‘sinew’	<i>käme</i> ‘paw pad, palm’	<i>kuli</i> ‘parasitic worm’
<i>jäñe</i> ‘ice’	<i>känti</i> ‘emotion, (singular) mood, feeling’ (< Ug)	<i>kułma</i> ‘area above eyes’
<i>jäñkä</i> ‘swamp’	<i>käri</i> ‘sterlet’	<i>kumi</i> 1. ‘morning’, 2. ‘thin snow’
<i>järi</i> ‘loop’	<i>kärnä</i> ‘any protective covering of an immobile organism’	<i>kumpa</i> ‘wave’
<i>jäse</i> ‘joint, node’	<i>käte</i> ‘forepaw, hand’ (< FU)	<i>kuni</i> ‘belly’
<i>jäwje</i> ‘beard lichen’	<i>kečä</i> ‘carp’	<i>kuñci</i> ‘star’
<i>jeki</i> ‘perch (fish)’	<i>kečä</i> ‘circle, ring’ (< FU)	<i>kunje</i> ‘moon, month’
<i>jelä</i> ‘daytime, Sun’	<i>keči</i> ‘knife’ (< FU)	<i>kupe</i> ‘air bladder’
<i>jipi</i> ‘owl’	<i>kede</i> ‘skin’ (< FU)	<i>kura</i> ‘a very delicate or fine layer of s’t’h, esp. snow or frost’
<i>jokće</i> ‘swan’	<i>kenti</i> ‘time II’ (< FU)	<i>kuro</i> ‘body’
<i>joke</i> ‘river’	<i>keñä</i> ‘nice weather’ (< FV)	<i>kuru</i> ‘knife’
<i>jöñsi</i> ‘bow (for shooting arrows)’	<i>kesä</i> ‘snowmelt’ (< FV)	<i>kurni</i> ‘raven’
<i>joukki</i> ‘crowd, pile, heap’	<i>kiči</i> ‘decoration on your body or clothes, a pleasant distinctive physical feature of s’one’	<i>kuuma</i> ‘fever’ (< FV)
<i>jikä</i> ‘age (all senses)’	<i>kiči</i> ‘soft, fresh snow’	<i>küntä</i> ‘fog’
<i>juki</i> ‘child, pup, cub’ (< FU)	<i>kide</i> ‘spring (season)’ (< FV)	<i>künti</i> ‘feeling, mood’ (< Ug)
<i>juma</i> ‘spirit, god’ (< FV)	<i>kiele</i> ‘tongue, language’	<i>küje</i> ‘snake’
<i>junča</i> ‘way, path’ (< FU)		<i>lappi</i> ‘plane’
<i>jurti</i> ‘friend’		<i>lemeši</i> ‘linden tree II’ (< FV)
<i>juwi</i> ‘pine’		<i>lieme</i> ‘juice, soup’ (< FU)
<i>jüti</i> ‘(nighttime) sky’		
<i>kaća</i> ‘endpoint’ (< FU)		

<i>linta</i> ‘bird’ (< FU)	<i>niñä</i> ‘smell usually associated with women’	<i>pene</i> ‘dog’ (< FU)
<i>liwa</i> ‘sand’ (< FU)	<i>noka</i> ‘Arctic fox’ (< Smy)	<i>peri</i> ‘skin of a mammal’
<i>lämpi</i> ‘entropy’ (< FV)	<i>numi</i> ‘space (where the planets and stars are)’	<i>pesä</i> ‘nest’
<i>leppi</i> ‘cover, roof’	<i>ñace</i> ‘grass’ (< Smy)	<i>pijra</i> ‘bladder chamber of digestive system other than stomach (e.g. appendix, crop)’
<i>lomi</i> ‘body heat, heat of a dwelling, interior heat’ (< FU)	<i>ñañce</i> ‘gill’	<i>piksi</i> ‘cord, string, connection’
<i>loppa</i> ‘mold that grows after dampness’ (< FP)	<i>ñewle</i> ‘arrow’	<i>pilwe</i> ‘cloud’ (< FU)
<i>louna</i> ‘day (unit)’	<i>ñepli</i> ‘reindeer calf’	<i>pimi</i> ‘tended grass’ (< Ug)
<i>luji</i> ‘pine marten’	<i>ñila</i> ‘internal fluid of any organism’ (< FU)	<i>piñseme</i> ‘lip’
<i>luke</i> ‘number, amount’	<i>ñile</i> ‘elevated structure’	<i>poika</i> ‘male family member younger than you’ (< FU)
<i>lume</i> ‘fallen snow’ (< FP)	<i>ñime</i> ‘milk’ (< Smy *ñim)	<i>poita</i> ‘ermine’
<i>lunta</i> ‘goose’ (< FU)	<i>ñinše</i> ‘milt sac’ (< FU)	<i>poji</i> ‘aspen tree’
<i>luoje</i> ‘south’ (< Māñsi and Sámi)	<i>ñomali</i> ‘rabbit’	<i>pola</i> ‘berry I’
<i>luppa</i> ‘moss’ (< FV)	<i>ñori</i> ‘marsh water’	<i>polwe</i> ‘knee’
<i>luwe</i> ‘bone, marrow’	<i>ñouŋa</i> ‘salmon’	<i>pori</i> ‘old’ (< FP)
<i>lupi</i> ‘leaf, letter’	<i>ñuli</i> ‘slime, slime mold’	<i>poske</i> ‘cheek’
<i>luppi</i> ‘butterfly, moth’	<i>ñulki</i> ‘fir tree’	<i>puji</i> ‘waterfowl’
<i>lapci</i> ‘any place where it is safe to keep a baby’	<i>ñuorke</i> ‘cartilage’	<i>puna</i> ‘soft fuzzy fur, down (of a bird)’
<i>lupša</i> ‘dew’	<i>ñurme</i> ‘meadow’	<i>puri</i> ‘roe’
<i>mage</i> ‘land, earth, Earth’	<i>oiwa</i> ‘head’	<i>purka</i> ‘storm’
<i>maidā</i> ‘forest’	<i>omča</i> ‘beetle’	<i>purki</i> ‘time I’
<i>maksa</i> ‘liver’	<i>onči</i> ‘nelma (fish)’	<i>puti</i> ‘crust, esp. icy’
<i>māñci</i> ‘non-fleshy tail, such as that of a bird’	<i>onta</i> ‘heat II’ (< FP)	<i>puwi</i> ‘tree’
<i>mäkte</i> ‘grassy hill’	<i>oŋte</i> ‘cave’ (< FU)	<i>püiçi</i> ‘sharp, heavy instrument’
<i>mäte</i> ‘home’	<i>oŋti</i> ‘thorn’	<i>püñe</i> ‘hazel grouse’
<i>meke</i> ‘matter, deed, thing’	<i>opa</i> ‘glove, small and limited protective covering’ (< Smy)	<i>püli</i> ‘horsefly’
<i>miele</i> ‘mind’	<i>osa</i> ‘berry II’	<i>rati</i> ‘vapor’ (< FU)
<i>mini</i> ‘arc, curve, (1D) shape’	<i>owe</i> ‘door, port, dam, gate’	<i>reñi</i> ‘heat I’
<i>miñi</i> ‘atmosphere’ (< FU)	<i>pači</i> ‘color’	<i>repä</i> ‘fox, person’
<i>muna</i> ‘egg’	<i>padwe</i> ‘fungus’	<i>rine</i> ‘a layer of water or ice on something’
<i>munji</i> ‘blunt instrument’	<i>paji</i> ‘willow tree’	<i>rümi</i> ‘twilight’
<i>mura</i> 1. ‘bit, crumb’, 2. ‘cloudberry’	<i>paši</i> ‘rift, crack, gorge’	<i>sawa</i> ‘syllable, (singular) breath’ (< Ug, FV)
<i>muri</i> ‘knot or other irregularity in something’	<i>pakša</i> ‘tumor’	<i>säksä</i> ‘dirt, dust I’ (< FP)
<i>näke</i> ‘seem, look (intr.)’ (< FU)	<i>pała</i> ‘frost I’ (< FU)	<i>säñe</i> ‘air’
<i>neide</i> ‘someone romantically available’	<i>päälä</i> ‘eternity’ (< FP)	<i>säpi</i> ‘squirrel’
<i>nide</i> ‘stem, stalk, handle’	<i>päiwä</i> ‘fire II’ (< FU)	<i>seipä</i> ‘fleshy tail of non-canid’
<i>niere</i> ‘snout, nose’	<i>päki</i> ‘pinecone, cone shape’	<i>señceli</i> ‘lizard’
<i>nime</i> ‘name’	<i>päkšenä</i> ‘linden tree I’ (< FV)	<i>sidi</i> 1. ‘endeavor, hurry, goal’, 2. ‘wetland’ (< FU)
	<i>päñe</i> ‘head, core, center of function’	<i>sikše</i> ‘fall, autumn’ (< FU)
	<i>pedpä</i> ‘shoulder blade’	
	<i>pelme</i> ‘dirt, dust II’ (< FP)	

sira ‘snow of any kind’ (< Smy)
soja ‘forelimb, arm’
soksi ‘Siberian pine tree’
sudī ‘finger’
suŋe ‘summer’
suŋeli ‘lily’
suone ‘tendon’
sukse ‘the paws of an Arctic fox, snow shoes’
süje ‘plant fiber suitable for twine’
süle ‘lap’
šali ‘band, stripe’
šari ‘snow that has melted, refrozen, and become hard’
šarma ‘exhaust vent’
šarna ‘answer, magic word, s’t h it took a lot of effort to come up with’ (< FU)
šarta ‘deer’
šäke ‘tinder’ (< FV)
šäŋe ‘braid’
šeri ‘row, layer, order, one of multiple ordered groups’
šidä ‘heart’
šide ‘charcoal’
šilä ‘fat, lard’
šilmä ‘eye’
šije ‘turn, (rounded) angle’
šodka ‘eider duck’ (< FU)
šoiwa ‘clay, adobe’

šuri ‘pikefish’ (< FU)
šurme ‘dangerous animal’
šusa ‘tapeworm’ (< FU)
šuwe ‘mouth, muzzle’
šüne ‘tinder fungus’
šürjä ‘rim’ (< FV)
šäškä ‘otter’
šuje ‘point, dot, sharp tip’ (< FP)
šune ‘spirit’ (< FU)
taka ‘latter part, conclusion’
tarka ‘object, thing’ (< FU)
tarna ‘traversable vegetation’ (< FP)
täŋki ‘dry moss or grass’ (< FU)
tääwe ‘lung’
tälwä ‘winter’ (< FU)
täštä ‘omen, mark, sign, evidence’ (< FV)
tewe ‘work’ (< FV)
tewä ‘reindeer’
tone ‘number’ (< Smy *ton)
tori ‘struggle, strife, battle’
totke ‘tench’
touki ‘when the water level rises from heavy snowmelt or rain’ (< FU)
towi ‘lake, pond’
tukti ‘cross-bar, beam, strut’
tuule ‘fire I’
tulka ‘wing’
tüküre ‘mirror’ (< Hun *tükör*, W Mari *tügür*)

tügiti ‘fire III’ (< Ug)
uki ‘participant, player, party, side (of a matter)’
umi ‘hole, cavity, depression in’
umri ‘flame’ (< FP)
uode ‘year II’ (< FU)
utka ‘track, clue, note, piece of evidence’
ügi ‘kit, baby’
üje ‘night’
wači ‘root’
waiŋe ‘breath, life, soul’
wamši ‘butt, base of tail’
wanti ‘lover, spouse’
wańća ‘slush’
waške ‘metal’
wala ‘word II’ (< FV)
walki ‘light’ (< FU)
wara ‘crow’
wenči ‘face’
wenči ‘whole, total’
wete ‘water’
widi ‘brain’
wire ‘blood’
wiša ‘poison’ (< FU)
woča ‘filter, weir’
wolka ‘shoulder’
wonke ‘cave, deep hole’
wopi ‘sleeping-place’
wuore ‘mountain’

A.2.2 Verbs

ali ‘say s’t h meaningful, intone, pronounce, perform’
ama ‘drink, siphon off’
ami ‘sit’
amta ‘give (temporarily)’
ari ‘destroy, tear apart, dismember’ (< FU)
atti ‘reply’ (< Ug)
ańci ‘pay attention to’ (< FP)
aše ‘dig, construct, set up’

äčä ‘like’ (< FU)
äli ‘carry (with your full body)’
älwä ‘understand, be able’ (< FP)
ämiri ‘create, edit’
äŋi ‘burn I (intr.)’
äsi ‘heat (tr.)’ (< FU)
ceki ‘groan’ (< Smy)
ceńća ‘climb, ascend a surface’ (< Smy *cəńća)

cenci ‘creep (as a viscous liquid does)’ (< Smy)
cini ‘learn or notice via smell’ (< Smy)
cupe ‘beat (as a heart does)’ (< Smy *cupə)
čada ‘run’
čäŋki ‘break (intr.)’
čärke ‘hurt (intr.)’
čele ‘rub off with s’t h rough, abrade, scratch (an itch)’

- ćokki* ‘bend (intr.)’
ćori ‘flow, ooze (intr.)’
ćuokki ‘kiss’ (< Ug)
ćülki ‘glitter I’
ćüni ‘diminish (intr.)’
ćüppi 1. ‘bite gently, pinch, kiss’,
 2. ‘drip (intr.)’
čači ‘be born, grow (as an organism)’
čanči ‘ambulate, run (as a device does)’
čaŋi ‘strike’
čäkki ‘suffocate, drown (intr.)’
čäŋki ‘help’ (< FU)
čemi ‘ferment (intr.)’
četti ‘for the sun to set, to lay down to rest’ (< Ug)
čije ‘go fast’
čitti ‘fry’ (< Ug)
čoči ‘scrub, sweep, wipe off (tr.)’
čukka ‘steal’
dasi ‘evaporate’ (< Ug)
dući ‘flood’ (< Ug)
đukki ‘thrust’
e ‘don’t’
eći ‘fall’
ečki ‘praise’ (< FU)
elä ‘live’
eŋkiri ‘recite’ (< Ug)
eski ‘believe’
ešte ‘finish’
iči ‘weigh down, press on’
ime ‘suck’
ipi ‘smell, taste (tr.)’
iši ‘call out to (EF)’ (< FP)
itä ‘appear, flash, spark’ (< FU)
ittä ‘hang (up) (tr.)’
jaka ‘separate’
jama ‘lose functionality, be ill’
jari ‘draw (a picture)’ (< Ug)
jäkši ‘freeze, solidify’ (< FV)
jänti ‘congeal’
jäŋke ‘be missing or absent’
jekki ‘dance’
jeni ‘slice’
jeri ‘talk to in a scary way (yell, threaten, curse, etc.)’
jimä ‘sweet’ (< FV)
joksa ‘loosen (intr.), take off clothes (intr.)’ (< FP)
jomi ‘go off, set off, start’
juge ‘drink’ (< FU)
jukta ‘explain (s’t h hard to understand)’ (< FU)
juri ‘get lost or forgotten’
juta ‘wander’
jutta ‘bind, affix, add’
jüŋi ‘come’ (< Ug)
kaće ‘glance at’ (< FP)
kaći ‘give (permanently)’
kači ‘accuse’ (< FP)
kačka ‘gnaw, chew, shred’ (< FP)
kađa ‘leave, leave alone, abandon’
kaja ‘throw’ (< FU)
kaji ‘deal with, handle, process emotionally’ (< FU)
kaiki ‘resound (DF), sound (VF)’ (< FV)
kali ‘sleep over’ (< FU)
kalka ‘heave’
kani ‘scatter’ (< FU)
kanta ‘carry within’
kaŋi ‘cry out in distress’
kaŋki ‘ascend (PF)’ (< Ug)
kari ‘to have s’one or s’t h cause you anxiety (SF)’ (< FU)
karma ‘want I’
kaswa ‘develop (intr.)’ (< FU)
katti ‘penetrate, make it through, progress past an obstacle’
käči ‘catch a cold (DF), become infected (VF)’ (< FP)
käčke ‘hide away, conceal (tr.)’ (< FV)
kälä ‘wade’ (< FU)
kämäile ‘cuddle, touch thoroughly’ (< Smy *kämajl)
käri ‘bind’ (< FU)
käske ‘give an order’ (< FP)
kärte ‘bear (a hardship or challenge), experience something bad’ (< FV)
keje ‘skin an animal, prepare a meal’
kelke ‘it is necessary’ (< FU)
kenči ‘look for’ (< FU)
keni ‘growl’ (< Ug)
kerä ‘ask for, request’ (< FU)
kiče ‘glow softly, as embers’ (< FP)
kile ‘tickle, stroke, touch softly’ (< FU)
koči ‘remember (declaratively)’ (< FU)
korpe ‘become scorched’ (< FU)
koke ‘find, observe’
kola ‘die (unavoidably)’
konči ‘create s’t h intricate’
kori ‘bite (as an attack)’ (< FU)
korta ‘scorch, burn, use up, ruin’
koske ‘touch’ (< FP)
koška ‘become dry I’
kući ‘call, name’ (< FU)
kula ‘come to an end, finish, die’ (< FU)
kule ‘hear’
kulke ‘travel’
kulta ‘catch prey in water or in the air’
kunta ‘catch prey on land’
kuña ‘close your eyes’
kupsa ‘extinguish, put a stop to, shut down’
kure ‘bind, tie I’
kuri ‘knock out of place’
kuse ‘cough’
küigi ‘flirt’ (< FU)
küine ‘whine, cry’
küše ‘ask’ (< FV)
küši ‘play-fight’
kütke ‘bind II’ (< FU)
lače ‘get soft from water or boiling’ (< FU)
latti ‘see II’
lämpi ‘float’ (< FU)
le ‘exist at some point’ (< FU)

<i>leke</i> ‘obtain metadata from, get a sense of’ (< FU)	<i>oñi</i> ‘tame, harmless, nice (of s’t’h with a mind)’	<i>soske</i> ‘bite, hold in your mouth’
<i>likke</i> ‘move (intr.), work’	<i>pala</i> ‘eat hastily’	<i>sokta</i> ‘mix (tr.)’
<i>mačta</i> ‘be able (physically)’ (< FU)	<i>pane</i> ‘put, place, erect, make stable’	<i>suge</i> ‘paddle (intr.)’
<i>mañci</i> ‘tell a story, relate, explain’ (< Ug)	<i>pari</i> ‘cut, scrape, groove, fold’	<i>sula</i> ‘dissolve, melt (colloq.)’ (< FU)
<i>mälä</i> ‘touch to get a sense of’ (< FU)	<i>paše</i> ‘bake or roast’ (< FP)	<i>susi</i> ‘become wet II’ (< FU)
<i>mäli</i> ‘warm up, develop stride, accelerate’ (< Ug)	<i>päji</i> ‘glitter II’ (< FU)	<i>šan̄ki</i> ‘give off a scent’
<i>märi</i> ‘remember (procedurally), intuit’ (< Ug)	<i>pečkä</i> ‘cut’	<i>šari</i> ‘become dry II’ (< FU)
<i>mene</i> ‘go’	<i>peje</i> ‘boil (intr.)’	<i>šeli</i> ‘lose (a substance from your bulk), bleed (TF)’ (< FV)
<i>menesä</i> ‘love’ (< Smy)	<i>peksä</i> ‘hit, strike’	<i>šeri</i> ‘infect others with your mood’ (< FP)
<i>mentä</i> ‘make a mistake, err I’ (< FU)	<i>pele</i> ‘fear (SF)’	<i>šoje</i> ‘resound’ (< FU)
<i>mičä</i> ‘sweep together, gather’	<i>pese</i> ‘wash your head or face’ (< FV)	<i>šomi</i> ‘hunger’ (< FU)
<i>mige</i> ‘loan, sell’	<i>pili</i> ‘burn II (intr.)’ (< Ug)	<i>šure</i> ‘die (avoidably)’ (< FU)
<i>moni</i> ‘say’	<i>pilki</i> ‘bathe, be immersed in water’ (< FU)	<i>šan̄i</i> ‘want II’ (< FU)
<i>muči</i> ‘express happiness with your body language’ (< Ug)	<i>pisa</i> ‘dribble’ (< FV)	<i>šilki</i> ‘fly’ (< FU)
<i>muja</i> ‘touch, feel, rub’ (< FU)	<i>poča</i> ‘become mixed or impregnated with (TF)’	<i>šoka</i> ‘sigh, rest, relax’ (< FU)
<i>muli</i> ‘pass by, run out, finish existing, die’ (< FU)	<i>pori</i> ‘burn III (intr.)’ (< FP)	<i>šoke</i> ‘talk, speak’ (< FP)
<i>mura</i> ‘call out, howl, sing’ (< FU)	<i>pučka</i> ‘spring out, boil over’ (< FV)	<i>šušti</i> ‘rinse, wash II’ (< FV)
<i>muške</i> ‘wash I’	<i>puke</i> ‘sneak by crawling on your belly’ (< FU)	<i>šuode</i> ‘leak through’ (< FV)
<i>müki</i> ‘express happiness with your voice’ (< Ug)	<i>pukta</i> ‘jump’	<i>šuri</i> ‘divide, distribute, share’
<i>näke</i> ‘watch’ (< FU)	<i>puna</i> ‘spin (a thread), braid (tr.)’	<i>šuwī</i> ‘turn sour, ferment’ (< FP)
<i>nistä</i> ‘pant, blow your nose’ (< FV)	<i>puñi</i> ‘tend to, guard I’	<i>taje</i> ‘lose consciousness’ (< FV)
<i>nuska</i> ‘sniff’ (< FV)	<i>pura</i> ‘make a hole in’	<i>tale</i> ‘pretend’ (< Smy *talä)
<i>nusi</i> ‘clean by scraping’	<i>pure</i> ‘bite (for any reason)’	<i>täkki</i> ‘observe’ (< Ug)
<i>ñiele</i> ‘swallow’	<i>puši</i> ‘bubble’ (< Ug)	<i>teke</i> ‘do’
<i>ñiri</i> ‘write’	<i>puši</i> ‘blow’	<i>tepi</i> ‘err, make a mistake, lose your way II’ (< Ug)
<i>ñonči</i> ‘stretch (intr.)’ (< FU)	<i>püči</i> ‘become numb or necrotic’ (< FU)	<i>toge</i> ‘bring, carry’
<i>ñola</i> ‘sneak, move unnoticed’	<i>püči</i> ‘paint, dye, color (tr.)’ (< FU)	<i>torje</i> ‘protect’ (< FV)
<i>ñon̄da</i> ‘follow tracks’	<i>sagi</i> ‘let, lead, accompany’ (< FP)	<i>tošte</i> ‘dare’ (< FV)
<i>ñuole</i> ‘lick’	<i>sala</i> ‘hide (intr.)’	<i>tule</i> ‘come’
<i>ñun̄i</i> ‘rest’ (< FU)	<i>šan̄ca</i> ‘stand’	<i>tumpi</i> ‘slam’ (< Ug)
<i>ñüki</i> ‘tug forcefully at’	<i>sašti</i> ‘cast a shadow onto’ (< FP)	<i>tumte</i> ‘feel (general sense)’
<i>oča</i> ‘take care of’	<i>säje</i> ‘rot’	<i>tuna</i> ‘learn, actively perceive’
<i>oda</i> ‘sleep’	<i>säle</i> ‘get on/in’	<i>tun̄ke</i> ‘insert’
<i>odami</i> ‘dream’	<i>säne</i> ‘play’	<i>tuši</i> ‘notice’ (< FP)
<i>opta</i> ‘bark, call’	<i>säti</i> ‘take a portion of’	<i>uči</i> ‘yawn’ (< FU)
<i>otta</i> ‘notice’	<i>seri</i> ‘comb’ (< FP)	<i>uje</i> ‘swim’
	<i>sitta</i> ‘shit’	<i>umi</i> ‘guard II’ (< Ug)
	<i>soje</i> 1. ‘enter (EF)’, 2. ‘wish for (TF)’ (< FU for 2.)	<i>un̄a</i> ‘flow to, lead to, cause (EF)’
		<i>uri</i> ‘end up at (PF)’
		<i>üñi</i> ‘flirt with, chatter with, dote on’ (< Ug)

üri ‘drink’
wači ‘deeply regret, feel sad about (SF)’ (< FP)
wači ‘remember (episodically)’ (< FU)
wala ‘pour’ (< FV)
walī ‘glitter III’ (< FU)
wani ‘beat’ (< FU)
wari ‘wait, get dawned on’ (< FU, Ug)
watka ‘strip (s’t h off of a surface)’

watta ‘follow (tracks), perform induction on (evidence)’
wānti ‘look at’ (< FU)
wāpti ‘trap’ (< FP)
wāsi ‘disappear, get lost (as keys do)’ (< FU)
wedi ‘kill’ (< FU)
wetā ‘lead, guide, draw, pull, drive’ (< FU)
wīca ‘examine’ (< FU)

wige ‘carry’
woje ‘be allowed’ (< FU)
wole ‘be, exist’ (< FU)
woppe ‘study (all senses)’
worki ‘sew’
wuji ‘see I’
wuni ‘be forgotten’
wülü ‘experience, passively perceive’

A.2.3 Adjectives

aŋke ‘tight, short (of time)’
āči ‘too hot to touch I’ (< FU)
cānce ‘broad’ (< Smy *cāncə)
čari ‘hard, strong’
čāčkā ‘blinding’
čeri ‘grey about as bright as shadows’
čuppa ‘tight’
čama ‘just, only’
čawa ‘sour, acidic’
čuči ‘straight’
čukki ‘densely packed’
čupa ‘lean’
eli ‘humid’
enā ‘a lot of’
eri ‘old’
ičā ‘few’
isi ‘sit’ (< FV)
irwi ‘happy’ (< FU)
jara ‘having the shape of knotted wood’
jāpše ‘dangerously pointy’
jena ‘right, true’ (< Smy *ena)
joma ‘good I’ (< Ug)
josi ‘cold I’ (< FP)
juli ‘of a healthy weight’
jurma ‘deep’
kački ‘rotten, astringent’ (< FP)
kačke ‘bitter, poisonous’ (< FP)
kaja ‘curved, arched’
karwa ‘painful to touch or taste’

kauka ‘long II, far’ (< FU)
kāmā ‘hard’
kepā ‘easy, light’
kiča ‘(presently) emotionally unstable’ (< FV)
korki ‘tall II’ (< FU)
kuiwa ‘dry’ (< FU)
kuja ‘custom, habit, manner, mode’ (< FU)
kuma ‘bent’
kūci ‘ready’ (< FU)
kūčiri ‘bitter, acrid (smell)’ (< Ug)
kūni ‘light’ (< Ug)
lama ‘weak’
lamte ‘deep, low’
lauča ‘soft III’ (< FV)
lāñci ‘loose, insecure’
lāwli ‘heavy’ (< FV)
leñci ‘lukewarm’ (< FU)
leñi ‘flabby, yielding, malleable’ (< FU)
leppi ‘soft (like fur)’ (< FU)
loñca ‘soft II’ (< FU)
lekki ‘tight’ (< FU)
norja ‘flexible’ (< FV)
nuji ‘existentially tired, depressed’ (< FU)
nuñci ‘strong’ (< FU)
nački ‘raw, unripe’ (< FU)
ñami ‘soft (like skin)’ (< FU)

ñumi ‘soft I’
para ‘good II’ (< FP)
pāwe ‘warm I’
peči ‘ugly’
pelkkā ‘clean II’ (< FP)
pide ‘tall I, long I’
piłmi ‘black’
piri ‘fast’
pirkā ‘tall III’ (< Smy)
piša ‘red, yellow, green’
poča ‘become wet I’
poši ‘too hot to touch II’ (< FP)
pugri ‘tired, fatigued’ (< Ug)
puji ‘latter’
pūkkitti ‘too dark to see’ (< Ug)
reči ‘beautiful’ (< FP)
roči ‘mentally tired, sleepy’ (< Ug)
ročki ‘brittle’ (< FP)
ruti ‘rotten (as wood is)’ (< FU)
saja ‘grey darker than shadows’ (< FP)
sakka ‘dense’
sāsi ‘porous’ (< FP)
sere ‘white’ (< Smy *ser)
sine ‘blue, violet’
soji ‘cold II’ (< FP)
sose ‘fractal’ (< FV)
sari ‘quick’ (< Ug)
sāji ‘grey lighter than shadows’ (< Ug)

<i>šéppä</i> ‘clever’	<i>šorwa</i> ‘dry, shriveled, wrinkled’	<i>uli</i> ‘big, numerous’
<i>šiki</i> ‘solid’ (< FV)	<i>taŋketa</i> ‘stiff II’ (< FV)	<i>üčä</i> ‘small’
<i>šiwa</i> ‘clean I’ (< FU)	<i>tari</i> ‘numb’ (< FP)	<i>üči</i> ‘warm II’ (< FU)
<i>šomiri</i> ‘sad’ (< FU)	<i>tasa</i> ‘smooth, even’	<i>waji</i> ‘bad’ (< Smy *wəj, woj)
<i>šenä</i> ‘good, healthy, in working condition’	<i>täwde</i> ‘full’ (< FU)	<i>wäsä</i> ‘emotionally, sensorily, or socially tired, wanting to isolate’ (< FP)
<i>šoni</i> ‘warm III’ (< FP)	<i>teppi</i> ‘thick’ (< FU)	<i>wude</i> ‘new’
<i>šoppi</i> ‘dry to the touch’ (< FU)	<i>tiwä</i> ‘peaceful, quiet, still’ (< FU)	
	<i>turta</i> ‘stiff I’ (< FV)	

A.2.4 Postpositions

<i>ala</i> ‘bottom, space below’	<i>koče</i> ‘across, space above in transit’ (< FP)	<i>pački</i> ‘across, space through in transit’
<i>ede</i> ‘front’	<i>komi</i> ‘space inside mouth (or hand of human; anything that grabs)’	<i>piŋi</i> ‘in possession, on/at hand’
<i>erme</i> ‘north’ (< Smy *ermə)	<i>kutti</i> ‘surface supporting s’t’h’	<i>pučki</i> ‘inside, space within s’t’h hollow’
<i>jotka</i> ‘among, space within something dense’	<i>mäte</i> ‘home’	<i>wadki</i> ‘space between two streams or other dividing lines’
<i>kalma</i> ‘space where something is buried’	<i>miŋä</i> ‘back, space behind’ (< FU)	<i>wilä</i> ‘top, space above’
<i>keske</i> ‘middle’	<i>muli</i> ‘side, space next to’	

A.2.5 Kinship terms

Where multiple terms are listed, the terms can be either interchanged, or assigned to specific such family members.

Older relations:

emä ‘your birth parent’
äčä ‘your blood, but not birth, parent’
imi, ičä, imä, iči ‘s’one who raised you’
ewkki ‘s’one with a direct line to you, whether through raising or blood’ (< FU)
koska, nati, nate ‘s’one who was raised with you’
säče, čēčä ‘none of the above, but still close family’
ekä ‘none of the above, but still family’

Younger relations:

poika ‘your blood child’ (< FU)
ägi, äki, ugi, uki, jugi, juki ‘s’one you raised’
miñä ‘s’one with a direct line from you, whether through raising or blood’
eče, eči, ečä ‘s’one who was raised with you’ (< FU)
wäŋe, kidi ‘none of the above, but still close family’
läwä ‘none of the above, but still family’ (< FU)

A.3 Yukaghir, Yeniseian, and Eskimo-Aleut roots

A.3.1 Nouns

<i>aaikone</i> ‘Arctic fox (poetic)’ (< Ket <i>äjkon</i>)	<i>igelu</i> ‘den in snow’ (< E *iglu)	<i>kaaxine</i> ‘fox, person (poetic)’ (< Yugh <i>kóxin</i>)
<i>arime</i> ‘paw pad, sole’ (< Yuk *arimə)	<i>jeŋkile</i> ‘hearth, focus, power source’ (< Yuk)	<i>kidage</i> ‘energy, esp. thermal’ (< EA *kiðay)
<i>čiku</i> ‘sea ice’ (< EA)	<i>kaŋu</i> ‘snow goose’ (< EA *kaŋuR)	<i>leele</i> ‘bloody water’ (< Ket <i>lël(e)</i>)
<i>čila</i> ‘climate, weather’ (< EA)	<i>keliñe</i> ‘worm II’ (< Yuk *kelinčə)	

maxasi ‘medication’ (< Iñu *marasiq*)
ñeugu ‘fish slime’ (< EA *ñəvɣuR)
pedu ‘email’ (< EA *pətu)

talxi ‘tentacle’ (< A *talRiX)
teele ‘mammoth’ (< Ket tēl)

uiwi ‘mental health or ability’
 (< E *ujvi)
urane ‘slug or snail’ (< Ket *uran*)

A.3.2 Verbs

daaje ‘cuddle s’one to make them feel
 better’ (< Ket dàje)
dene ‘cry, weep (poetic)’ (< Ket *den*)
eede ‘send’ (< Ket ède)

eppaxi ‘lick clean’ (< E *əppaRiR)
kite ‘stroke’ (< Ket *kit*)
naku ‘squint’ (< I *nakuR)

qulixa ‘narrate, tell a story about’
 (< EA *quliRaR)
säätute ‘et your share’ (< Ket sātut)
uuse ‘warm with your body’ (< Ket ūs)

A.3.3 Adjectives

ayenige ‘relaxed, content’ (< CAY
 aɲniɣ)
ćumige ‘anxious’ (< EA)

iikete ‘feeling like you should be
 hated’ (< Ket *iket*)
ńapa ‘upright’ (< EA)

A.4 Latin and Greek roots

A.4.1 Nouns

alopekse ‘person’
animaalise ‘animal (member of Ani-
 malia)’
ipsixjatrija ‘psychiatry’
ipsixologja ‘psychology’
iskientija ‘science’
iskoola ‘school’
ispiraalis ‘spiral’

keemija ‘chemistry’
meetere ‘meter (unit)’
minuuta ‘minute’
molusku ‘mollusc’
penna ‘ballpoint pen’
piwlogja ‘biology’
puntijoo ‘function’
püsikä ‘physics’

sekuntu ‘second (unit)’
soojone ‘animal (informal, imprecise
 sense)’
uniwersitaase, uni ‘college’
wulpeese ‘fox (member of *Vulpes*)’
xoora ‘hour’

A.4.2 Numerals

jiljoo ‘1000^x’

A.5 Arabic roots

A.5.1 Nouns

Allaa ‘Abrahamaic god’
kitääpe ‘book’

qalame ‘pen or pencil’
qertaase ‘paper’

teppe ‘medicine (field)’
xaliila ‘intimate friend’ (< خَلِيلَة)

A.6 Persian and Sanskrit roots

A.6.1 Nouns

aštadaaji ‘grammar’ (< Sa.) *ñaaja* ‘logic’ (< Sa.)
naane ‘bread’ (< MP) *raja* ‘dye’ (< Sa.)

A.6.2 Numerals

saxasra ‘1000’ (< Sa.)

A.7 Classical Chinese roots

A.7.1 Nouns

čaje ‘tea’ *kiwene* ‘scroll’

A.8 Modern roots

A.8.1 Nouns

kompejuutere ‘computer’ (< Eng.) *palačinja* ‘crêpe’ (< Slavic) *wounne* ‘smartphone’ (< Eng.)
laptoppe ‘laptop’ (< Eng.) *telewounne* ‘phone of any kind’ (< Eng.) *xotele* ‘hotel’ (< Eng.)

A.8.2 Numerals

niwe ‘216’ (< Ndom nif)

A.9 Numerals

A.9.1 Senary

elemä ‘0’
ükte ‘1’
käktä ‘2 (cardinal)’
kektä ‘2 (quantifying)’
kolme ‘3’
neljä ‘4’
witte ‘5’
kutte ‘6’
kuutte ‘36’

niwe ‘216’
x-niwe ‘1296^x’
pälä ‘1/2’
x-nti ‘xth, 1/x’

A.9.2 Decimal

šeŋcemä ‘7’ (< FP)
ñala ‘8’ (< Ug)
ükteksä ‘9’ (< FV)
küme ‘10’ (< FV)
śata ‘100’ (< FU)
saxasra ‘1000’
x-jiljoo ‘1000^x’

A.9.3 Limping Hexadecimal

ñalakte ‘9’*ñalakta* ‘10’*ñalkolme* ‘11’*ñalja* ‘12’*ñalwitte* ‘13’*ñalutte* ‘14’*ñalcema* ‘15’*ope* ‘16’*kitä* ‘32’*näküre* ‘48’*tette* ‘64’*x-loge* ‘1024^x’*opel-* ‘x = 1’*kitäl-* ‘x = 2’*näkül-* ‘x = 3’*tettel-* ‘x = 4’

B

Compounds

B.1 From Uralic roots

B.1.1 Nouns

äñeikä ‘fundamental particle’ (< *äñe-jka*)
čäküdi ‘falling hail’ (< *čä-kudi*)
čätene ‘prime number’ (< *čä-tone*)
čätüleide ‘flint’ (< *čä-tule-jde*)
Čukkikuñci ‘Polaris’ (< *čukki-kuñci*)
čahjari ‘tumor’ (< *čam-jari*)
dihwire ‘sticky, drying blood’ (< *dīm-wire*)
jäsekke ‘graph (system of connected nodes)’ (< *jäse-kke*)
jütijkä ‘celestial object’ (< *jüti-jka*)
jütikki ‘the dark part of the sky at sunrise’ (< *jüti-kki*)
kāhwire ‘blood inside body’ (< *kām-wire*)
kāmilma ‘stormy sky (poetic)’ (< *kām-ilma*)
kāmmäge ‘flowing lava, magma’ (< *kām-mage*)
kāñküdi ‘falling rain’ (< *kām-kudi*)
keeleide ‘proto-language’ (< *keele-jde*)
kūñküdi ‘descending fog’ (< *kün-kudi*)
mageika ‘mineral’ (< *mage-jka*)
magekki ‘erosion surface’ (< *mage-kki*)
meelekke ‘dissociative system’ (< *meele-kke*)
neerečukki ‘nose’ (< *neere-čukki*)

neerešuwe ‘face’ (< *neere-šuwe*)
ñorwete ‘tea (pejorative or humorous)’ (< *ñor-wete*)
puntule ‘comfy fire’ (< *pun-tule*)
purkudi ‘falling snow’ (< *pur-kudi*)
puhjari ‘knotted mess of hair’ (< *pun-jari*)
pülküdi ‘descending air mass’ (< *pül-kudi*)
rümii ‘benefiting the senses’ (< *rümi~*)
toneika ‘prime factor’ (< *tone-jka*)
tulekki ‘embers’ (< *tule-kki*)
tükürenele ‘even, balanced’ (< *tüküre-nole*)
üjekki ‘the last hour before dawn’ (< *üje-kki*)
wačkudi ‘falling sleet’ (< *wač-kudi*)
walkudi ‘sunlight’ (< *wal-kudi*)
wammeele ‘tired, foggy mind’ (< *wač-meele*)
weejüti ‘outer space (poetic)’ (< *wet-jüti*)
wemmage ‘(still) lava, magma’ (< *wet-mage*)
wetiće ‘subconscious’ (< *wet-iće*)
woole ‘exist uniquely’ (< *~wole*)
woorekke ‘mountain range’ (< *woore-kke*)

B.1.2 Verbs

odači ‘nap’ (< *oda-či*)

tunakta ‘teach’ (< *tuna-cta*)

wülüktä ‘show’ (< *wülü-cta*)

C

Phrases

C.1 Interjections

C.2 Sentence words

C.3 Verb series

D

Sample texts

D.1 “Täällä Pohjantähden alla” by Ville Valo

Taana Čukkikuńci ala taan le kotamage
Määñ noon wole a-kota miń uumi-kuńciť wiñe

Taana čüjen aņke purki čüjen aņke e čuriń
Nuuna wole kulatta noon aņenigema miń

Taana kaņi čääke-śidä täwdek küńe śilmä
Nuuna mući čülkil śilmä müki kiiči-śidä

Tulka käske šilkimäni kiide-nuñ, min śidä
Kota woleńsi nu, karma elämä mi pälä.

D.2 “Täällä Pohjantähden alla” by Petri Laaksonen

Tana Čukkikuńci ala
pirkä-pirkä čüñkä
wičä mi kauka kaukauleñ
tule ti eñwañ wudii.
Tana Čukkikuńci ala
rümipčigii täwdele ilma
torje leppä eegii
teke ii mi.

Čukkikuńci ala
tušele mi
kađac mi
wülü čama Čukkikuńci
čüteppiktä küńeli mi tiń.

Tana Čukkikuńci ala
nujiwgoge muri
tana pukegri wilää
walkudikkić kuñe.

Tana Čukkikuńci ala
ńolańši iće čarine
wedi wülüjkät ee
ari šidä oo, kani ee.

D.3 “The Ice”

D.4 “The Northern Lights”

D.5 “Spring Night”