SNOW, MARIA, AINO, ANNA, KEKTÄKUWTE, ESRA

MINÄNKÄLE

Contents

Part I

Grammar

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:

- A serious reconstruction of Proto-Uralic
- Feeling like we're foxes
- Feeling like Siberia never got colonized by the Russians or invaded by the Mongols
- Yukaghir things
- Loanwords from famous literary and scientific languages for science stuff
- Loanwords from words we know (mainly Hungarian and English ones) for modern stuff
- Senary
- Noun incorporation
- Not having to use case markers
- Case markers
- Octal
- Derivational morphology
- Evidentials
- Not marking tense but having endless aspects
- Maybe-realis and irrealis moods
- More moods but actually it's more derivational morphology
- Decimal
- Not having to distinguish number

- Having to distinguish affiliation
- Phonologies with small syllables
- Vowel harmony
- Mixed-base hexadecimal/base-64
- Not using any conjunctions or relativizers
- Free word order
- Verb serialization
- Conlanging

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

- Austronesian alignment (our noun incorporation system approximates it)
- Syllabic consonants
- Tones
- /ø/
- Phonemic length
- Weird number systems, such as p-adic or bijective ones
- Particles used for syntax
- A practical, unique writing system (it seperately 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	t͡ʃ ⟨č⟩	t͡ɕ ⟨ć⟩	k
	s	ʃ ⟨š⟩	(ɕ) ⟨ś⟩	
w	ð̮ l r ⟨d l r⟩		ð̮ʲ j ⟨đ j⟩	ɣ ~ ɯ̯ ⟨g⟩

Minänkäle's consonants don't change much based on where they are. The stops and affricates /p t t͡ʃ t͡ɕ k/ can occur as geminates anywhere in the middle of a word, but not at the edges. /ɣ/ is realized as [ɯ̯] between vowels and before consonants, and [ɣ] elsewhere. /t͡ɕ/ becomes [ɕ] at the end of syllables, where it's spelled ⟨ś⟩. Between vowels, it wavers between either, as [t͡ɕ ~ ɕ], and is still spelled ⟨ć⟩. It is also marginally phonemic in a small set of Indo-Iranian loanwords that begin with [ɕ], such as *śäććemä* and *śëta*.

Historical note 2.1 (i)
ć is PU **ś*, based on widespread observations that it's distributed like a stop. The allophony and marginal phonemicity of *ś* is artistic license. *d đ* are PU **d, *ď*, based on Pystynen's observations that they're distributed like sonorants, and have mostly sonorant reflexes. *g* is PU **x*, and the realization is artistic license, along with the observation that it's distributed like a sonorant.

2.1.2 Vowels

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

There are certain stems that begin with /i/ as the first vowel, but have [ɑ̣] for their second vowel, and thus for all subsequent instances of /a/. Thus, there are really *two* /i/ phonemes: /i_1/, after which /a/ is realized as [æ], and /i_2/, after which it is realized as [ɑ̣]. The Latin and Cyrillic orthographies distinguish these indirectly by notating the difference between non-initial [æ] and [ɑ̣], while the Inuktitut syllabics orthography does not distinguish the two. /i_2/ 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		ɤ o	⟨ë o⟩
æ	⟨ä⟩	ɑ	⟨a⟩

Initial vowels

ə	⟨e⟩
a	⟨a/ä⟩

Non-initial vowels

Historical note 2.1 (ii)
This is the analysis of the PU vowel system presented in Aikio 2019, but with Pystynen's well-argued **ë* rather than the traditional **ï*. The possibility of final **o* is disregarded, and emulated with **əw* instead.

2.2 Phonotactics

Minänkäle has four kinds of syllables, each with different rules: stem-initial syllables, non-initial stem syllables, 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*, though apart from *g*, they can all become initial consonants in loanwords. 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. If the stem has consonantal suffixes attached, then may only be a single consonant that's part of the set of consonants that can occur in suffixes in general (see below), or *-j*{*m*, *n*}, when the *-j-* and the nasal are two separate suffixes.

The set of consonants that suffixes can have is far smaller than the ones that can occur in stems. Suffixes can be just a single consonant, or a -CV syllable, or even certain -CCV syllables. They are shown on the right, along with the two vowels that suffixes can have. There can be multisyllabic suffixes, but they're pretty much always made up of multiple shorter suffixes. As noted earlier, long /p t t͡ʃ t͡ɕ k/ can't be single-consonant suffixes on their own. Given the rules below, the amount of suffixes allowed is 14 -C suffixes, 36 -CV suffixes, and 236 -CCV suffixes, for a total of 286 single-syllable and single-consonant suffixes.

Stems and suffixes follow the same rules for what consonants can be next to each other. These rules are:

1. Two of the same consonant aren't allowed after each other (unless you're talking about long /p t t͡ʃ t͡ɕ k/).
2. When the cluster is all part of one morpheme, obstruents can't go before sonorants. When there's a morpheme boundary, however, /s ʃ/ are allowed to precede sonorants.
3. Obstruents can't go before long /p t t͡ʃ t͡ɕ k/ either.
4. Sonorants can't go after nasals, except in the cluster /ŋɣ/.
5. The only things that can go before /p/ are /m/, and all the non-nasal sonorants besides /w/.
6. /n t t͡ʃ/ aren't allowed before /t͡ɕ/, and /ɳ t͡ɕ/ aren't allowed before /t͡ʃ/.
7. The only nasal allowed before /k/ is /ŋ/.
8. /t t͡ʃ t͡ɕ/ aren't allowed before /s ʃ/.

Historical note 2.2 (i)
These phonotactics are from Aikio 2019, alongside the observation that loanwords such as PU **repä(śə)* can begin with **r*.

Historical note 2.2 (ii)
The inclusion of *ń* among the below phonemes is artistic license, to allow for *ńć* clusters. The inclusion of *g* rests on the observation that the **k* in the abessive suffix **-ktama* is reflected as **w* in Proto-Khanty, and can thus be plausibly reconstructed as PU **x*, now that the cluster is no longer expected to create long vowels in Finnic. Differentially reconstructing PU **k* or **x* based on Ugric evidence is a principle invented by Pystynen.

m	n	ɳ	ŋ
p	t	t͡ɕ	k
	s		
w	l r	j	ɣ ~ ɯ̯

Suffix consonants

ə
a

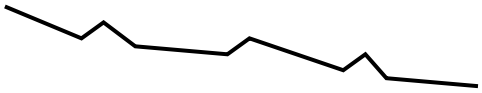
Suffix vowels

Historical note 2.2 (iii)
Few of these rules are fully supported by comparative evidence. None of them contradict any evidence either, however. Rules 1, 5, and 7–10 are fully supported in Aikio 2019. Rule 2 is almost supported fully, but the inclusion of **š* is artistic license. Rule 3 seems obvious and fully supported, but we haven't seen it noted anywhere. Rule 4 is fully supported apart from the inclusion of **ŋx*, which is based on Pystynen's suggestion that the cluster may be responsible for Ugric **ŋk* and Permic **∅* from PU **ŋ*. Rule 6 was puzzled out through observation, though a more well-researched formal statement of it must exist somewhere.

9. /wp/ and /wm/ are not allowed.
10. While normally three consonants are forbidden from being next to each other, *-j*CC- is allowed when there's a morpheme boundary somewhere in the cluster.

2.3 Prosody

Similar to the prosody of many Uralic languages, initial syllables of polysyllabic words are stressed using intonation, and also have their vowels extended slightly. Otherwise, all syllables take up roughly the same time. The pitch across a single word is always descending, with a relatively dramatic drop after the first syllable, and a less dramatic descent in subsequent syllables. From word to word, the pitch jumps somewhat, to accentuate the first syllable of each new word. The sentence *«Puča repäćen ponče uwana.»* meaning, "The little fox's tail soaks in the stream," has the following melody:



Elements of compounds have special rules for the melodies of their components, covered in §2.4.2.

Historical note 2.3 (i)
This section, as well as §2.4.2, takes the generally accepted position that PU had initial stress, and expands it entirely based on artistic license, and on simulating modern Uralic languages.

2.4 Morphophonology

2.4.1 Suffixes

All of Minänkäle's morphology is either compounding or suffixing. When a suffix is added to a stem ending in *-a/ä*, there's no alterations; they are simply glued together. However, stems that end in *-e* lose the final vowel, so this will often create illegal clusters, usually of three consonants. For two-consonant clusters, the *-e-* is usually just reinserted if the cluster isn't allowed, as in *nime-je* > *nimeje* and *wäke-ŋä* > *wäkeŋä*. However, if they are two different nasals, then the second one gets deleted. If they are two of the same stop, affricate, or nasal, then they collapse into one long version of that consonant. This is the only way to get long nasals.

In three-consonant clusters, if the first consonant is *j*, then it's no problem; that's allowed. In situations where the first two consonants don't belong to a word stem together, then the only solution for breaking up the cluster is to reinsert the *-e*. But if they do, then they can get deleted to make room. Only nasals, stops, and affricates can get deleted this way, and only if it would make a cluster that's allowed. First, you try deleting the first consonant, as in *manče-ta* > *mačta* and *lëpće-ta* > *lëšta*. If you can't do that,

Historical note 2.4 (i)
The two-consonant elision rules are mostly artistic license, but an attempt is made to be consistent with the compounds given in Aikio 2019. The nasal deletion rule is from the 1sg possessor endings reconstructed by Janhunen, in which the case suffixes **-m* and **-n* cause the **-m-* in the possessor ending to elide.

Historical note 2.4 (ii)
These rules are generalized from the three examples given (from Aikio 2019). We observed no elision outside of **-CCə* stems, so that is disallowed.

either because it's not the kind that you can delete or it would make an illegal cluster, you try deleting the second consonant, as in *kulke-ta* > *kulta*. If neither of those work, you reinsert the *-e-*.

2.4.2 Compounds

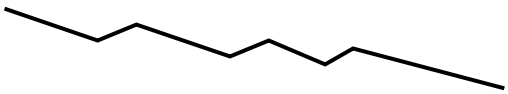
Minänkäle forms compounds for several reasons: to incorporate nouns into verbs, to string together verbs for serial verb constructions, to string together nouns with other classifying nouns, and to string together concepts into compounds that represent the concept that unites them. Each element of a compound behaves phonotactically like its own word, but the pitch melody used for the compound is different depending on what kind of compound it is.

Historical note 2.4 (iii)
This entire section is artistic license, though it is based in a few real concepts. The noun incorporation represents PU's "nominative objects", and the verb serialization and semantic compounding represents PU's tendency to form semantic compounds consisting of two elements. The classifying compounds represent the equivalence of adjectives and nouns in PU.

Noun incorporation and verb serialization use the same kind of melody, as they are part of the same kind of construction. In these, the pitch descends as normal, but halts its descent at the first syllable of each new element in the compound. These syllables, like the initial syllables of independent words, are slightly longer than other syllables. The sentence *«Poskene·peljäne·ńale·jüräjme.»* meaning, "I licked and nipped at their cheek and ears," has the melody:

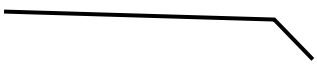
Poskene · peljäne · ńale · jüräjme.

This freely varies with a similar melody, where the pitch rises before the initial syllable of each element, almost up to the starting pitch of the previous element, and otherwise descends normally.



Poskene · peljäne · ńale · jüräjme.

Classifier-classified compounds have a more-or-less level, high tone for the classifiers, and then start falling after the first syllable of the classified elements. The phrase *uwaŋa·päjew·puna* 'flowing, willowy fur' has the melody:



uwaŋa · päjew · puna

Finally, multi-concept compounds have a falling tone throughout, not distinguishing elements from each other at all.

2.5 *Orthography*

2.5.1 *Latin alphabet*

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		*a*	N	n		*äne*
Ä	ä	Ae ae	*ä*	Ń	ń	Nj nj	*äńe*
Ć	ć	Cj cj	*će*	Ŋ	ŋ	Ng ng	*äŋe*
Č	č	Cz cz	*če*	O	o		*o*
D	d		*ćade* or *de*	P	p		*pe*
Đ	đ	Dj dj	*đe*	R	r		*äre*
E	e		*e*	S	s		*äse*
Ë	ë	Eo eo	*ë*	Ś	ś	Sj sj	*śa*
G	g		*kimele* or *ge*	Š	š	Sz sz	*äše*
I	i		*i*	T	t		*te*
J	j		*je*	U	u		*u*
K	k		*ka*	Ü	ü	Ue ue	*ü*
L	l		*äle*	W	w		*we*
M	m		*äme*				

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. Elements of compounds are separated with the mid-dot ·. 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, · is replaced with −, « and » are both replaced with ", and ‹ and › are both replaced with '. Hence:

> «Elä SMS·mege·pelek me *auditorium*:na.» monajme Jonathan:ŋ.
> `"Elae SMS-mege-pelek me auditorium:na." monajme Jonathan:ng.`
> “Don’t be afraid to send me an SMS at the auditorium,” I told Jonathan.

2.5.2 *Cyrillic alphabet*

Labial		Alveolar		Postalveolar		Prepalatal		Velar	
м	⟨m⟩	н	⟨n⟩			њ	⟨ń⟩	ӈ	⟨ŋ⟩
п	⟨p⟩	т	⟨t⟩	тш	⟨č⟩	ч	⟨ć⟩	к	⟨k⟩
		с	⟨s⟩	ш	⟨š⟩	щ	⟨ś⟩		
в	⟨w⟩	д л р	⟨d l r⟩			з й	⟨đ j⟩	г	⟨g⟩

Minänkäle's Cyrillic orthography contains only two letters not in the Russian alphabet, ⟨њ⟩ and ⟨ӈ⟩. It has a one-to-one mapping with the Latin orthography, except for both *č* and *tš* corresponding to ⟨тш⟩. In practice, however, *tš* never appears, even in loanwords. The example concluding the previous section is written:

«Елэ SMS·мегы·пелык ме auditorium:на.» монаймы Jonathan:ӈ.
"Don't be afraid to send me an SMS at the auditorium," I told Jonathan.

и ы	⟨i ü⟩	у	⟨u⟩
е	⟨e⟩	ъ о	⟨ë o⟩
э	⟨ä⟩	а	⟨a⟩

Initial vowels

ы	⟨e⟩
а э	⟨a ä⟩

Non-initial vowels

2.5.3 *Inuktitut syllabics*

Labial		Alveolar		Postalveolar		Prepalatal		Velar	
ᒪ	⟨m⟩	ᓇ	⟨n⟩			ᓐᔭ	⟨ń⟩	ᖕᒐ	⟨ŋ⟩
ᐸ	⟨p⟩	ᑕ	⟨t⟩	ᑦᔭ̵	⟨č⟩	ᑦᔭ	⟨ć⟩	ᑲ	⟨k⟩
		ᓴ	⟨s⟩	ᔭ̵	⟨š⟩	ᔅᔭ	⟨ś⟩		
ᕙ	⟨w⟩	ᖤ ᓚ ᕋ	⟨d l r⟩			ᕐᔭ ᔭ	⟨đ j⟩	ᒐ	⟨g⟩

Minänkäle's Inuktitut syllabics orthography is its simplest and most straightforward. Out of the consonants, ⟨ᖕᒐ⟩ has a few special cases: word-final *-ŋ* is simply ⟨ᖕ⟩, and the clusters *ŋg* and *ŋk* are ⟨ᖖᒐ⟩ and ⟨ᖕᑲ⟩ respectively.

Out of the eight stem-initial vowels, *a i u e* are represented as is usual for Inuktitut syllabics, while *ä ë ü o* are associated with a modifying ⟨ᒃ⟩. Stems beginning with vowels represent it as the full letter ⟨ᖃ⟩, while stems beginning with consonants use the full letter of the consonant, followed by the modifying ⟨ᒃ⟩, which precedes any coda consonants.

The orthography does not distinguish non-initial *a* and *ä*, and it allows you to write syllable-final *-w* without adding an extra letter. *a/ä* and *e* are represented with what would otherwise be *a i*, while the equivalents of initial *e u* stand for *aw ew* non-stem-initially. Thus, the previously-mentioned loanword *ipsegewlewgeja* is rendered ᐃᑉᓯᒍᓗᒋᔭ. The example concluding the previous sections is written:

«ᐁᓚ SMS·ᒣᒋ·ᐯᓚᒃ ᒣ auditorium:ᓇ.» ᒣᒃᓇᔾᒥ Jonathan:ᖕ.
"Don't be afraid to send me an SMS at the auditorium," I told Jonathan.

Auditorium remains unitalicized, both because it's already obvious that it's a foreign word, and because Inuktitut syllabics fonts rarely provide italics in the first place, Latin or not.

ᐃ ᖁ	⟨i ü⟩	ᐅ	⟨u⟩
ᐁ	⟨e⟩	ᕿ ᙯ	⟨ë o⟩
ᖃ	⟨ä⟩	ᐊ	⟨a⟩

Initial vowels

ᐃ	⟨e⟩	ᐅ	⟨ew⟩
ᐊ	⟨a/ä⟩	ᐁ	⟨aw⟩

Non-initial vowels

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