

SNOW, MARIA, AINO, ANNA, KEKTÄKUWTTE, 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:

- 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 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 ~ ʁ ⟨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 [ʁ] 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: /i<sub>1</sub>/, after which /a/ is realized as [æ], and /i<sub>2</sub>/, 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. /i<sub>2</sub>/ 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 <sub>h</sub> , F}P	N <sub>h</sub>	homorganic nasal
• Fw	P	p, t, k, q
	J	w, l, ɭ, j, r, ɣ
	F	s, ʃ, ʒ, ɕ, ʈʃ̄, 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-wləwɣəjə] (< 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 §2.4.3.)



## 2.4 Morphophonology

### 2.4.1 Suffixes

All of Minänkäle'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.

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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): *éle-le* > *éelle*. 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.

### 2.4.2 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.  $N_1 N_2$  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*.

### 2.4.3 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>	Ñ ñ	<i>ña</i>
Ć ć	Cj cj <i>ća</i>	Đ đ	<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>	Š š	<i>ša</i>
G g	<i>kimele</i> or <i>ga</i>	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	<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.