








lel-lyipɔ-di jcl lel-di jcl jeʔfle-lycɔɔɔ

Middle Rymakonian, the language of Rymako

uruwi

၁^h၃^e.၂၈^p-debc-delbe^v fle)c^a

α^hω^e.ωⁿφ-debc-delbe^o flelc^θ

A complete grammar

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0.1 | Introduction

1 | Phonology and orthography

1.1 | Phoneme inventory

Middle Rymakonian underwent several sound changes from Lek-Tsaro, in the following order:

$s \rightarrow \text{ɬ}$	$(\blacklozenge\{w, j, u, y\})$	<i>NB this is a whistled sibilant.</i>
$\eta \rightarrow \text{j}\eta$	$(\square\blacklozenge)$	
$\theta x \rightarrow \theta$	$\neg(\blacklozenge\square)[x = \emptyset]$	
$C_1[+fr] \rightarrow C_1[+v]$	$(V_1\blacklozenge V_2)$	
$\text{ɹ} \rightarrow \text{z}$	$(V_1\blacklozenge V_2)$	
$\{x, \text{ɥ}\} \rightarrow \text{ɥ}$		
$V_1[+r] \rightarrow V_1[-r]$		
$k \rightarrow c$	$(\blacklozenge i)$	
$t \rightarrow \text{tʃ}$	$(\blacklozenge i)$	
$r \rightarrow \text{r}$		

Thus Middle Rymakonian has the following phoneme inventory:

Table 1.1: The consonants of Middle Rymakonian.

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Nasal	m		n	j	ŋ	
Plosive	p b		t d	c ɟ	k g	ʔ
Fricative	f v	θ ð	s z	ʃ ʒ	x ɣ	
(coarticulated)	fx vɣ	θx ðɣ		fʃ vʒ		
(whistled)			ɬ ʂ			
Affricate			ts	tʃ		
Lateral fricative			ɬ ɮ			
Approximant			ɹ	j	w	
Lateral approximant			l			
Tap			r			

Table 1.2: The vowels of Middle Rymakonian.

	Front	Central	Back
High	i	ɤ	u
Mid	ɛ		ʌ
Low		a	

In addition to consonants and vowels, Middle Rymakonian has rod signals, represented by numbers. Rod A is blue and held by one's dominant hand and B is red and held by one's non-dominant hand. Rod signals can occur only at the end of words.

1. Rod A is raised to one's chest, while B is pointed down.
2. Rods A and B are crossed in the front.
3. Rod B is raised upwards in front of the nondominant arm, while rod A is lowered.
4. Rod A is pointed sideways near one's nondominant arm, while rod B is lowered.
5. Rods A and B are extended to the sides.
6. Rods A and B are extended, facing forward.
7. Rod A is raised forward, while B is pointed to the side.
8. Rod B is raised forward, while A is pointed to the side.
9. Rod A is raised besides one's head, while Rod B is extended toward the side of the dominant hand. This rod signal does not exist alone, but rather as a transition to the seventh or eighth rod signal.

In addition, the fourth rod signal has a “halfway” form where Rod A is retracted away from the nondominant arm.

Lowering both rods is interpreted as an absence of a rod signal.

If the use of rods are unavailable, the numerals of the positions may be pronounced.

1.2 | Hacmisation

As using IPA is quite wieldly, we shall use the following hacmisation, with superscript letters to indicate phonemes not found in Arka.

Rod signs are represented by the hacm digits <1 2 3 4 5 6 7 8 9 Δ> attached to the end of the verbs they encompass. Halfway rod signals are represented by a subscript digit: <9_h>. Transitions from the ninth rod signal are written <L⁹ L^Δ>. Proper words are preceded by a backslash <\>.

Note that the hacmisation is slightly different from Lek-Tsaro's use of hacm. Lek-Tsaro's <h s> are now written using <1^h 1^s>, for instance.

1.3 | Phonotactics

As opposed to Lek-Tsaro, which uses syllables, Middle Rymakonian uses *phonoruns*. The following *defined categories* are used:

These are converted into *actual categories* as follows:

Table 1.3: The consonants of Middle Rymakonian.

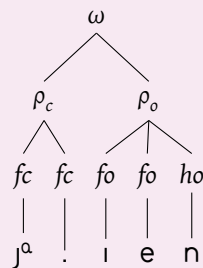
	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Nasal	ɒ		n	nʲ	nʷ	
Plosive	d b		ɾ ɳ	ɟ ɲ	ɣ ɸ	.
Fricative	ɑ u	j ^a z ^u	j z	ɬ s	ɰ ^l ɸ ^s	
(coarticulated)	ɑ ^h u ^h	j ^h z ^h		ɑ ^l u ^s		
(whistled)			j ^o z ^o			
Affricate			ʃ	ʈ		
Lateral fricative			ɭ ^l s ^l			
Approximant			ɹ	ɥ	o	
Lateral approximant			ɭ			
Tap			ɾ			

Table 1.4: The vowels of Middle Rymakonian.

	Front	Central	Back
High	ɕ	ɜ	ə
Mid	e		ɔ
Low		ɪ	

- Full-open and full-closed phonemes are always realised as open and closed, respectively.
- Half-open phonemes are open unless the previous phoneme is full-closed.
- Half-closed phonemes are closed unless the previous phoneme is full-open.
- Neutral phonemes that do not occur word-initially inherit the actual category of the phoneme before it.
- Neutral phonemes that occur word-initially are closed.

A *phonorun*, then, is a maximal sequence of phonemes that are either all open or all closed within a word. For instance, take $\langle j^a . i e n \rangle$ < $\times j^h i . e n$ >:



Note that two phonemes in the word were metathesised when it was derived from Lek-Tsaro. In general, a word with n spoken phonemes cannot have more than $\lceil n/2 \rceil$ phonoruns. Therefore, the following changes are executed in order until an application of one rule reduces the number of phonoruns to an acceptable number, after which the other rules are not executed:

Table 1.5: Categories of phonemes.

Category	Phonemes
Full-open	ɪ e ɔ ə u z ^u z z ^o s φ ^s s ^l ɥ o ʔ ɿ
Half-open	ɜ μ ɪ ɒ n n ^u n ^φ ɳ ɽ ^q
Neutral	j j ^o ɭ ^l u ^h z ^h u ^s ɭ
Half-closed	ɑ ɭ ɭ ^l ɽ Δ ɽ ^Δ
Full-closed	j ^Δ ɑ ^h j ^h ɑ ^l d b ɾ ɳ ɽ ^u ɳ ^u ɳ ^φ ɽ ^l ɽ ^Δ ɽ ^Δ ɽ ^Δ

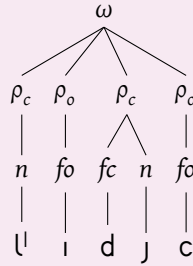
$$\begin{aligned}
X_1[do]X_2[dc]R[do] &\rightarrow X_2X_1R \\
X_1[dc]X_2[do]R[dc] &\rightarrow X_2X_1R \\
X_1[dc]X_2[do]?X_3[do] &\rightarrow X_1?X_2X_3 \\
X_1[do]?X_2[do]X_3[dc] &\rightarrow X_1X_2?X_3 \\
X_1[op \geq 0]X_2[dc]X_3[do]X_4[op \leq 0] &\rightarrow X_1X_3X_2X_4 \quad [X_1.op + X_3.op - X_2.op - X_4.op \geq 6] \\
X_1[op \leq 0]X_2[do]X_3[dc]X_4[op \geq 0] &\rightarrow X_1X_3X_2X_4 \quad [X_2.op + X_4.op - X_1.op - X_3.op \geq 6] \\
X_1[do]X_2[dc]X_3[do] &\rightarrow X_1X_3X_2 \quad \text{for ever} \\
X_1[dc]X_2[do]X_3[dc] &\rightarrow X_2X_1X_3 \quad \text{for ever}
\end{aligned}$$

where R means a rod signal, X represents a spoken phoneme and op stands for *openness* (full-open = 2, neutral = 0, full-closed = -2). do is short for $op > 0$, and dc is short for $op < 0$. (The same rule can occur multiple times within a word, although such invocations may not intersect each other.)

All of the rules above move from right to left and do not occur across compound boundaries. The last two rules are executed in parallel in a loop until the number of phonoruns is reduced to an acceptable number or both rules converge to a fixed point. This process will hereafter be called *phonorun reduction*.

In the example above, $\langle xj^{\Delta}i.en \rangle$ had $4 > \lceil 5/2 \rceil$ phonoruns, so the third rule was applied. This changed the word into $\langle j^{\Delta}.ien \rangle$, which has $2 \leq \lceil 5/2 \rceil$ phonoruns.

An example where phonorun reduction does not result in a word with few enough phonoruns is $\langle l^l idjc \rangle$ *soup*, which has the starting phonoruns



Obviously, the first four rules do not match anywhere in the word. The sixth rule seems promising because it matches the pattern at $\langle l^l idj- \rangle$, but the required sum is $0 + 2 + 2 + 0 < 6$, so this rule does not match. In addition, the last two rules do not match, and we encounter a fixed point. In such cases, the anomaly is allowed to pass.

The dictionary lists forms of roots *before* the phonorun reduction happens, because affixes can radically affect which phonemes are switched.

1.3.1 | Prosody

The time taken to utter a phonorun is given by the model:

$$t_o = K \cdot (1 + v \cdot \alpha + c \cdot \beta) \quad (\text{phonorun is open}) \quad (1.1)$$

$$t_c = K \cdot \eta \cdot (\gamma + v \cdot \alpha + c \cdot \beta) \quad (\text{phonorun is closed}) \quad (1.2)$$

where K is a constant varying from person to person, v is the number of vowels and c is the number of consonants in the run. α, β, γ and η are also constants such that $\beta < \alpha$, and both γ and η are less than 1. In other words:

- There is a fixed cost for starting a new phonorun. This cost is less for closed phonoruns than open.
- Closed phonoruns are faster to say than open runs with the same number of consonants and vowels.
- Closed phonoruns are also more length-dependent than open runs.
- It takes less time to utter consonants than vowels.

An estimate of the constants for the standard dialect would be $\alpha = 0.37, \beta = 0.46, \gamma = 0.82$ and $\eta = 0.61$.

1.4 | Vowel harmony

Middle Rymakonian inherits vowel harmony from Lek-Tsaro. Thus $\langle \text{c e} \rangle$ are front vowels, $\langle \text{ə ɔ} \rangle$ are back vowels and $\langle \text{i ɜ} \rangle$ are neutral. Most roots with neither front nor back vowels act as if they had front vowels, though some might behave as if they had back vowels. Many affixes will change depending on which vowels are present.

If by some odd chance a word has both front and back vowels, then the rightmost vowel (before phonorun reduction) takes precedence.

1.5 | Rod signal sandhi

The following rules influence rod signals depending on the previous rod signal (of the current or previous word):

- $\langle \emptyset \rangle$ is realised as $\langle \text{J} \rangle$ after $\langle \emptyset \rangle$ or $\langle \text{ŋ} \rangle$.
- $\langle \text{q} \rangle$ is realised as $\langle \text{L}^{\text{q}} \rangle$ after $\langle \text{q} \rangle$ or $\langle \text{L}^{\text{q}} \rangle$.
- $\langle \Delta \rangle$ is realised as $\langle \text{L}^{\Delta} \rangle$ after $\langle \Delta \rangle$ or $\langle \text{L}^{\Delta} \rangle$.

Rod sandhi does not affect the orthography or phonorun reduction.

2 | Syntax

2.1 | Basic word order

The basic word order is VSO. Descriptors follow what they modify.

However, unlike Lek-Tsaro, Middle Rymakonian has oblique arguments. As these were historically formed from a preclause, all obliques precede V. Likewise, any arguments with conjunctions also precede V. Such arguments that were formed from a clause will be called *historically clausal arguments* (HCAs).

Usually, oblique arguments are prepared by prepositions and fall after what they modify (unless the antecedent is V), but if an oblique argument is a conjunctive phrase or governs an HCA, it uses a postposition instead and precedes its antecedent.

2.2 | Questions

In all questions, the intonation of the second word of the last clause is lowered considerably.

Binary questions have the interrogative polarity marker and no change to syntax.

In wh-questions, the wh-word is pulled to the front (i. e. before the verb). This requires case marking for the wh-word:

ʃezcn ʁeəʒɲɪ dɔʒ
who-ACC speak-FAR.PAST-Q PR.FAR
Whom did you speak to?

This applies only to questions, not interrogative-mood clauses that act as relative clauses:

ʁeəʒɲɪ dɔ ʃel, ɥɪf ʁɔ.
speak-FAR.PAST-Q PR.FAR who, see-NEAR.PAST PR.ANAPH_OBJ
I saw the person whom you talked to.

2.3 | Multiple clauses

A sentence might have multiple clauses. Each clause in a sentence follows the basic VSO order, and clauses are separated with commas.

3 | Nouns

Nouns are declined for number, case and definiteness.

3.1 | Number

Countable nouns come in two numbers: *dual* and *non-dual*.

There are two different conceptualisations of the dual number. Some dialects use the dual number to refer to all cases with two objects (we say that they have the *unpaired dual*); others use it only to refer to objects in pairs (these lack the unpaired dual). In general, dialects without the unpaired dual are more prevalent in cities, as well as northern regions.

Each countable noun has an *inherent number*. A noun whose number agrees with its inherent number receives no marking; a mismatch causes the noun to receive a special affix.

3.2 | Case

In a clause with both the subject and object directly expressed in that order, both the subject and object are declined in the nominative case (and their roles are inferred through word order). In a clause where only one is present, or where both are expressed in the opposite order, the subject will receive the nominative case and the object will receive the accusative case.

3.3 | Noun classes

There are three overarching groups of noun classes.

1. Countable
 - (a) Sentient – such as humans, AIs, deities.
 - (b) Non-sentient – anything else.
2. Measurable
 - (a) Measure – all measurable nouns, especially units of measurement.
3. Uncountable
 - (a) Edible – edible (to humans).

- (b) Inedible – inedible (to humans).
- (c) Abstract – abstract ideas.

3.4 | Definiteness

The definite form of a noun is formed regularly by reduplicating the first syllable (without the coda): <DIZI> “a person” becomes <DIDIZI> “the person”.

3.5 | Declension table

Here, the inflected forms of words are shown both before and after phonorun reduction to illustrate the pattern. The declension patterns for each class is shown, both for roots ending with consonants and those ending with vowels.

Note that noun declensions for countable classes respect vowel harmony. For nouns with back vowels, replace the front vowels with the back vowels of the same height and rounding, and vice versa. (Noun declensions for measurable and uncountable classes do not respect vowel harmony.)

3.5.1 | Countable classes

Table 3.1: Declensions for countable nouns.

	Direct #	Inverse #
Sentient: <xDIZI> “person”		
Nominative	DIZI (DIZI)	DIZI (DIZI)
Accusative	DIZIn (DIZIn)	DIZInIl (DIZInIl)
Sentient: <xj ⁰ .en> “magician”		
Nominative	j ⁰ .en (j ⁰ .en)	j ⁰ .el (j ⁰ .el)
Accusative	j ⁰ .ezcn (j ⁰ .ezcn)	j ⁰ .epcl (j ⁰ .epcl)
(Note that the final consonant is preserved only in the direct nominative form.)		
Non-sentient: <xD3n ⁰ ɔ> “rabbit”		
Nominative	D3n ⁰ ɔ (D3n ⁰ ɔ)	D3n ⁰ ɔ.ə (D3n ⁰ ɔ.ə)
Accusative	D3n ⁰ ɔD (D3n ⁰ ɔD)	D3n ⁰ ɔuə (D3n ⁰ ɔuə)
Non-sentient: <x.cDen> “house”		
Nominative	.cDen (.cDen)	.cDe.c (.cDec.)
Accusative	.cDezCD (.cDezCD)	.cDeɲcuc (.cDeɲcuc)

3.5.2 | Measurable and uncountable classes

Table 3.2: Declensions for measurable and uncountable nouns.

	Direct
Measure: <xɲ3D3> “day (continuous)”	
Nominative	ɲ3D3 (ɲ3D3)
Accusative	ɲ3D3n (ɲ3D3n)
Measure: <xDeI> “volume” (in expressions such as <xDeI–ɥ3ɔ> “cupful”)	
Nominative	DeI (DeI)

	Direct
Accusative	de ^z cn (de ^z cn)
Edible: <xfe _μ .c> “beef”	
Nominative	fe _μ .c (fe _μ .c)
Accusative	fe _μ .cn (fe _μ .cn)
Edible: <xɔɪn> “rice”	
Nominative	ɔɪn (ɔɪn)
Accusative	ɔɪncn (ɔɪncn)
Inedible: <xpəɔ> “gold”	
Nominative	pəɔ (pəɔ)
Accusative	pəɔbe (pəɔbe)
Inedible: <xɪɔɪj> “stone”	
Nominative	ɪɔɪj (ɪɔɪj)
Accusative	ɪɔɪjde (ɪɔɪjde)
Abstract: <xə ^h əɔ> “empathy”	
Nominative	ə ^h əɔ (ə ^h əɔ)
Accusative	ə ^h əɔcn ^ʰ (ə ^h əɔcn ^ʰ)
Abstract: <xɸɔɔ> “[the number] five”	
Nominative	ɸɔɔ (ɸɔɔ)
Accusative	ɸɔɔcn ^ʰ (ɸɔɔcn ^ʰ)
Here, the final consonant is voiced if it is a fricative.	

(NB: be sure to change any <ɪ> and <ɸ> into <ɪ^{ʰʰ}

3.6 | Pronouns

Personal pronouns are not divided into first, second and third persons as in most languages. Instead, they fall into six categories that exhibit different behaviour depending on whether they occur as the first non-oblique noun in the clause or elsewhere (second noun, verb inflection, oblique):

Table 3.3: Pronoun persons and their functions.

Person	Role in first position	Role elsewhere
Near	The speaker.	The first non-oblique argument of the clause. The person with which the first argument is conversing. An entity that is neither the speaker, the listener nor the first argument.
Far	The listener.	
Other	A third entity.	
Generic	A generic entity (akin to “one”).	
Anaphoric Subject	The subject of the previous clause. Also used on the verb when an oblique or conjunction is present.	
Anaphoric Object	The object of the previous clause.	

In wh-questions, the wh-word assumes the second position and the other argument becomes the first.

If a clause has no explicit arguments, the first argument is understood to be the subject.

Table 3.4: Personal pronouns (before phonorun reduction).

	Nominative		Accusative	
	Non-dual	Dual	Non-dual	Dual
Near	fi	aczc	fin	aczen
Far	dc	bpi	dcn	bpin
Other	nc	lizc	ncn	lizen
Anaph. Sub.	pi	n ⁴ cpc	pin	n ⁴ cpen
Anaph. Obj.	pc	n ⁴ apc	pcn	n ⁴ apcn
Generic	.ə		.ən	

3.6.1 | Last-clause pronouns

The anaphoric pronoun <ebj> (accusative: <bezen>) is grammatically an other pronoun, and it refers to the previous clause said. Likewise, <bdecj> (accusative: <bdecn>) refers to the clause before the previous one. All of these pronouns should undergo phonorun reduction inside a compound.

3.7 | Compounding

Nouns can be compounded together in a head-initial manner. When that happens, only the leftmost noun is the one to be declined.

del-μɜɟɔ-ɑ'ɜɟə-ɸɕɟ
 volume-cup-water-five
 five cupfuls of water

Note that pronouns can modify other nouns, in which personal possession is indicated:

del-μɜɟɔ-ɑ'ɜɟə-ɸɕɟ-fi
 volume-cup-water-five-PR.NEAR.ND
 (arg1)'s five cupfuls of water

Descriptors can also compound on nouns. Unlike in Lek-Tsaro, this is the only way to have descriptors modify nouns.

ɖɪzɪ-lɸəi
 ɖɪzɪ-ləfi
 person-old
 old people

3.8 | Possession

"X's Y" is translated as <Y=ɖɪ X> (plus phonorun reduction). The possessive construction is also used to create appositives. (Note the head-marking!)

Observe that possession marks the head, and <–Dɪ> is a clitic, not an affix, as in the following example:

D3D3ŋ^ə–a^lʒpə–Dɪ j^h.ien
 D3D3ŋ^ə–a^lʒpə–Dɪ j^h.en
 DEF~rabbit-water=GEN magician
 the magician's water rabbit

This construction is also used when compounding would otherwise be used, but the dependent is larger than a single noun or descriptor:

nɣizɪDɪ i.lle an fɪj
 cat=GEN 4096 and two
 4098 cats

4 | Verbs

Verbs are conjugated for person of the subject, tense, polarity and tellicity, in two paradigms. Conjugation respects vowel harmony. In addition, a final <-j> or <-z> in the stem of a first- or second-conjugation verb becomes whistled in the generic form.

The dictionary lists the stem of the verb and the conjugation scheme used.

Table 4.1: Person-tense conjugations for first-conjugation verbs, using <ɔil-> “(S) eats (O)”, before and after phonorun reduction.

	Nonpast	Past
Near	ɔilɪn (ɔilɪn)	ɔilɪf (ɔilɪf)
Far	ɔilɪn (ɔilɪn)	ɔilɜj (ɔilɜj)
Other	ɔilɪ (ɔilɪ)	ɔilɜ (ɔilɜ)
Anaph. Sub.	ɔile (ɔile)	ɔilel (ɔilel)
Anaph. Obj.	ɔilc.e (ɔil.ce)	ɔilc.el (ɔil.cel)
Generic	ɔilc (ɔilc)	ɔilc (ɔilc)

Table 4.2: Person-tense conjugations for second-conjugation verbs, using <nən-> “(S) kills (O), (O) dies”, before and after phonorun reduction.

	Nonpast	Past
Near	nənɪn (nənɪn)	nənɪf (nənɪf)
Far	nənɪn (nənɪn)	nənɜj (nənɜj)
Other	nənɪ (nənɪ)	nənɜ (nənɜ)
Anaph. Sub.	nənɔ (nənɔ)	nənɛl (nənɛl)
Anaph. Obj.	nənə.ɔ (nənə.ɔ)	nənə.ɔl (nənə.ɔl)
Generic	nənə (nənə)	nənə (nənə)

Notes:

- The polarity-tellicity suffix is added after the person-tense ending.
- “Negative atelic” means something akin to “unsuccessfully tried to avoid doing X”.
- The interrogative polarity, in addition to marking questions, is used to mark clauses that may or may not be true but are referred to later in the sentence.
- As an exception, the generic form of <y-> is <yə>.

Table 4.3: Person-tense conjugations for third-conjugation verbs, using <µeu-> “(S) spreads (O)”, before and after phonorun reduction.

	Nonpast	Past
Near	µeucn (µeucn)	µeucf (µeucf)
Far	µeuin (µeuin)	µeu3j (µeu3j)
Other	µeui (µeui)	µeu3 (µeu3)
Anaph. Sub.	µeue (µeue)	µeuel (µeuel)
Anaph. Obj.	µeuc.e (µeuc.e)	µeuc.el (µeuc.el)
Generic	µeu3 (µeu3)	µeu3 (µeu3)

Table 4.4: Polarity-telicity suffixes for verbs (before phonorun reduction). The interrogative affix can also follow a negative affix.

	Positive	Negative	Interrogative
Telic	-·	-f ⁴ e / -ᵛ	-l ¹
Atelic	-DC / -Də	-j ¹	-l3

Some examples:

ᵈᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ.
eat-NEAR.NONPAST fish flower
Fish eat flowers.

ᵈᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ, ᵈᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒ.
eat-NEAR.NONPAST fish flower, eat-NEAR.NONPAST cat PR.ANAPH_SUB
Fish eat flowers, and cats eat fish.

ᵈᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ, ᵒᵒᵒ ᵒᵒᵒᵒᵒᵒ.
ᵈᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ, ᵒᵒᵒ ᵒᵒᵒᵒᵒᵒ.
eat-NEAR.NONPAST fish flower, eat-ANAPH_SUB.NONPAST grass-ACC
Fish eat flowers, and they eat grass.
(Grass is inedible to humans, but edible to fish.)

ᵈᵒᵒᵒᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ.
ᵈᵒᵒᵒᵒᵒᵒ ᵒᵒᵒᵒ ᵒᵒᵒᵒ.
eat-NEAR.NONPAST-NEG flower fish
Flowers don’t eat fish.

ᵈᵒᵒᵒ ᵒᵒ ᵒᵒᵒᵒᵒᵒᵒᵒᵒ, ᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒ.
ᵈᵒᵒᵒ ᵒᵒ ᵒᵒᵒᵒᵒᵒᵒᵒᵒ, ᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒ.
carry-NEAR.NONPAST PR.OTHER DEF~book, worry-NEAR.NONPAST PR.NEAR
PR.LAST_CLAUSE
He has the book; that worries me.
or: That he has the book worries me.

ᵈᵒᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒᵒᵒᵒᵒᵒᵒ, ᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒ.
ᵈᵒᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒᵒᵒᵒᵒᵒᵒ, ᵒᵒᵒᵒ ᵒᵒ ᵒᵒᵒ.
carry-NEAR.NONPAST-Q PR.OTHER DEF~book, worry-NEAR.NONPAST PR.NEAR.INT

PR.LAST_CLAUSE

He might have the book; that worries me.

or: That he might have the book worries me.

4.1 | Aspect

Verbs can also be marked for aspect, either using a rod sign directly on the verb, or a particle with a rod sign, placed anywhere between the verb it modifies and the next verb.

Table 4.5: Aspect markers. Those with hyphens are attached to verb. Those without hyphens are placed as separate particles anywhere after the verb.

Aspect name	Marking	Meaning
Imperfect	–ɿ	An action that is currently going on. Also used to distinguish static actions as opposed to dynamic (e. g. <i>wear</i> as opposed to <i>put on</i>).
Interrupted	ɿʔcɿ	An action that was interrupted.
Perfect	–ɿ	An action that has already finished. Changes present tense to immediate past. Also used to distinguish dynamic actions as opposed to static (e. g. <i>put on</i> as opposed to <i>wear</i>).
Gnomic	–ɿ	A general truth or aphorism, or an action done habitually.
Gnomic dubitative	ɿʔcɿ	A general truth or aphorism that the speaker considers to be false.
Deontic necessity	–ɿ	An action that the speaker insists on happening.
Deontic recommendation	–ɿ	An action that the speaker recommends that happens.
Epistemic necessity	ɿəɸɿ	An action that the speaker infers is happening. (<i>Situational necessitative and potential moods are grouped with their epistemic versions.</i>)
Deontic potential	–ɿ	An action that the speaker permits to occur.
Epistemic potential	ɿəɸɿ	An action that the speaker infers that might happen.
Unexpected	–ɿ	An action that is unexpected (akin to using “but”).
Comparative	deɿ	Indicates an action of greater intensity than what was described in the previous clause.
Nonexclusive subject	ɿʔcɿ	Indicates that the subject comprises not only of what is explicitly mentioned, but also other things.

Aspect name	Marking	Meaning
Nonexclusive object	c^{uo}	Indicates that the object comprises not only of what is explicitly mentioned, but also other things.
Nonexclusive argument	c^{uo}	Combination of both nonexclusive subject and nonexclusive object.
Temporal universal	$-L^q$	The statement is always true (“never true” when negative).
Temporal non-universal	$j^o L^q$	The statement is not always true (“sometimes true” when negative).
Spatial universal	$-L^\Delta$	The statement is true (false) everywhere.
Spatial non-universal	$j^o L^\Delta$	The statement is false (true) somewhere.

An attached rod signal reverts $\langle j^a z^u \rangle$ to $\langle j^h z^h \rangle$, respectively, and might affect phonorun reduction.

An example:

$\text{f}^{\text{ilil}}\text{f}^{\text{dc1}} \text{fi } nc, lcnc.\text{el}\text{f}^{\text{d}} \text{d}^{\text{zn}}\text{f}^{\text{iu}}\text{a}-\text{pi}.$
 $\text{f}^{\text{ilil}}\text{f}^{\text{dc1}} \text{fi } nc, lcnc.\text{el}\text{f}^{\text{d}} \text{d}^{\text{zn}}\text{f}^{\text{iu}}\text{a}-\text{pi}.$
 fight-NEAR,PAST-ATELIC-IMPERFECT PR.NEAR PR.OTHER, shoot-ANAPH_OBJ.PAST-
 UNEXPECTED knee-INV.ACC-PR.ANAPH_SUB
 I tried to fight them, but they shot my knee.

4.1.1 | Simultaneous temporal and spatial aspects

A verb may be modified by both temporal and spatial aspects, in which case their mutual order is significant:

Table 4.6: Behaviour when both temporal and spatial markers exist, where t is a time variable and \vec{x} is a space variable.

Marking	Definition	Equivalent
$-L^\Delta q$	$\forall t \forall \vec{x} : P(t, \vec{x})$	$\forall t \forall \vec{x} : P(t, \vec{x})$
$-L^\Delta j^o L^q$	$\neg \forall t \forall \vec{x} : P(t, \vec{x})$	$\exists t \exists \vec{x} : \neg P(t, \vec{x})$
$j^o L^\Delta q$	$\forall t \neg \forall \vec{x} : P(t, \vec{x})$	$\forall t \exists \vec{x} : \neg P(t, \vec{x})$
$j^o L^\Delta j^o L^q$	$\neg \forall t \neg \forall \vec{x} : P(t, \vec{x})$	$\exists t \forall \vec{x} : P(t, \vec{x})$
$-L^q \Delta$	$\forall \vec{x} \forall t : P(t, \vec{x})$	$\forall \vec{x} \forall t : P(t, \vec{x})$
$-L^q j^o L^\Delta$	$\neg \forall \vec{x} \forall t : P(t, \vec{x})$	$\exists \vec{x} \exists t : \neg P(t, \vec{x})$
$j^o L^q \Delta$	$\forall \vec{x} \neg \forall t : P(t, \vec{x})$	$\forall \vec{x} \exists t : \neg P(t, \vec{x})$
$j^o L^q j^o L^\Delta$	$\neg \forall \vec{x} \neg \forall t : P(t, \vec{x})$	$\exists \vec{x} \forall t : P(t, \vec{x})$

4.2 | Historically clausal arguments

Historically clausal arguments (HCAs) are arguments of a sentence that are derived from clausal constructions. They include obliques and conjunctions. HCAs precede V.

An HCA that modifies a verb causes it to be conjugated in the anaphoric subject person.

4.2.1 | Obliques

An oblique expresses a relation between the verb of a sentence or some argument thereof.

An oblique phrase that modifies a verb falls before it. An oblique phrase that modifies either S or O pulls it before the verb as well.

If the argument of the oblique phrase is not an HCA, then it uses a preposition and follows its antecedent (unless it is the main verb). If the argument is an HCA, then the phrase uses a postposition and precedes its antecedent.

Consider the preposition <ɪn> *in, on, at (location)* (from Lek-Tsaro <ɪn> (S) *is at* (O)). The sentence *Ryze is hiding from me in the tree* would be translated as:

ɪn ʃuɔl neɹae1 ɪn ʔɜze
in tree hide-ANAPH.SUB.NONPAST-IMPERFECT PR.NEAR.ACC Ryze

Now say that we want to translate *Ryze is hiding from me in the tree with fruit*. *With* would be translated as <ɖɹ> (from Lek-Tsaro <ɖɹɪn> *hold, carry*, which also begets <ɹɪn>), but now we have nested obliques, which means we need to use <ɪn> as a postposition:

ʃuɔl ɹɪn ʔɜze ɪn neɹae1 ɪn ʔɜze
tree with fruit in-POST hide-ANAPH.SUB.NONPAST-IMPERFECT PR.NEAR.ACC Ryze

Deriving a postposition from a preposition is done *after* phonorun reduction. Prepositions that end with a closed phonorun receive <-ɪ>, and those that end with an open phonorun receive <-z>.

The prefix <ɪ- > negates an adposition.

4.2.2 | Conjunctions

Conjunctions are derived from verbs as well; for instance, <an> *and* is derived from Lek-Tsaro <acn> *join*. However, in Middle Rymakonian, conjunctions are infixes:

ʔɜze an ʋɪzɪl ɖɪl ʃɛɹ..
ʔɜze an ʋɪzɪl ɖɪl ʃɛɹ.c.
Ryze and Tazyl eat-ANAPH.SUB.NONPAST beef

(Note that as long as S still precedes O, no case marking is needed.)

Unlike Lek-Tsaro's approach, this approach works well with more complex sentences:

ʔɜze an ʋɪzɪl ʃɛɹ. an ʌɪdʒ ɖɪl.
ʔɜze an ʋɪzɪl ʃɛɹ.c an ʌɪdʒ ɖɪl.
Ryze and Tazyl beef and soup eat-ANAPH.SUB.NONPAST

An entire conjunctive phrase can be modified by treating the conjunction as a nominal antecedent:

ɳɥɪzɪ an-ɪʃɪ ɖɜɳɔ
ɳɥɪzɪ an-ɪʃɪ ɖɜɳɔ

cat and-old rabbit
old cats and rabbits

4.3 | Connectors

(This section will refer to section 2.11 of $\backslash\psi\text{bl} \supset \alpha\text{lo} /(\alpha'\backslash\text{nn}^\Phi\text{lo}$ extensively.)

Middle Rymakonian uses connectors to express relationships between clauses. In Middle Rymakonian, connectors do not occupy an indexed position in the clause; however, they tend to be placed near items that should receive less emphasis than others. Two connectors cannot occur consecutively unless the number of connectors is more than one plus the number of other words.

A connector is composed of three parts:

- The *type* (see table 4.7) specifies the semantic role of the connector.
- The *sequence identifier* (hereafter *seqid*) disambiguates the use of multiple connectors of the same *type* within a sentence. This is an arbitrary continuation of the last phonorun of the *type*.
- The *parity* allows the reuse of *seqids* within a *type*. This is $\langle-\rangle$ or $\langle-\rangle$ if the *type* ends with a closed phonorun, and $\langle-\text{I}\rangle$ or $\langle-\text{Z}\rangle$ if it ends with an open phonorun.

Unlike most parts of speech, a complete connector, composed of the three parts above, does not undergo phonorun reduction.

Connectors *x* and *y* are part of the same *set S* iff all of the following conditions hold:

- *x* and *y* are identical (i. e. all three parts are the same between *x* and *y*)
- they belong to clauses α and β , respectively (NB: it is possible that $\alpha = \beta$)
- there are no clauses between α and β that has a connector with the same *type* and *seqid* but a different *parity* from *x* or *y*

Note that “belonging to the same connector set” is an equivalence relation.

Table 4.7: Connector types.

Name	Arity	Middle Rymakonian	Explanation
Ordinary	n	IJ-	Covers both the sequential and parallel connectors of Jbl.
Analogous	2	Id-	“For the same reason α is true, β is also true.” Also used as an “and” without stating any order.
Subversive	2	IQ-	“ α but β .”
Augmentative	n	$\text{O}\Phi^S\text{-}$	Later statements apply to a greater extent than earlier statements.
Explanatory	n	CD-	“ θ_1 causes θ_2 causes θ_3 etc.”
Conditional	2	CJ-	“If α , then β .”

Clauses of a connector set are joined by the relation of the connector used therein:

דויל ל'רדע ר'צזז יעי.
 דויל ל'רדע ר'צזז יעי.
 eat-NEAR.PAST fish flower ORDINARY-⟨e⟩-0
 The fish ate the flower.

 יעי נדדדל ר'רעזע ר'טזל.
 ORDINARY-⟨e⟩-0 dance-NEAR.PAST child tree
 Then the child danced around the tree.

 יעי דילל ל'ל'רדע.
 eat-ANAPH_SUB.PAST ORDINARY-⟨e⟩-0 DEF~fish-ACC
 Then the child ate the fish.

 דעלדלל פ'פ'נ' יעז דז.
 דעלדלל פ'פ'נ' יעז דז.
 imitate-NEAR.PAST-IMP frog ORDINARY-⟨e⟩-1 PR.FAR
 At another time, a frog was imitating me. (...)

4.4 | Comparatives

The comparative is a function $\text{cmp} : A \times A \times (A \rightarrow \mathbb{R}) \times (A \times A \rightarrow \{0, 1\}) \rightarrow \{0, 1\}$, where $\text{cmp}(a, b, f, \sqsupset) = f(a) \sqsupset f(b)$.

Consider the following sentences:

Fish eat flowers more than cats.
 More fish eat flowers than cats.

Semantically, they can be translated to:

$$\text{cmp}(\text{fish}, \text{cats}, a \mapsto (\# \text{ of flowers eaten by } a), >) \quad (4.1)$$

$$\text{cmp}(\text{fish}, \text{cats}, a \mapsto (\# \text{ of } a \text{ that eat flowers}), >) \quad (4.2)$$

The heart of comparatives in Middle Rymakonian is the quadrivalent verb $\langle \text{ר'צזז } a \text{ } b \text{ } f \text{ } \sqsupset \rangle$. Thus:

דוילל ר'צזז-י'ר'נ, ר'צזז ל'רדע נ'פ'זי פ'נ נעל.
 eat-GENERIC-Q flower-ACC-how_many, CMP-NEAR fish cat PR.ANAPH_OBJ >
 Fish eat more flowers than cats.

 דוילל .א-י'ר'נ ר'צזז, ר'צזז ל'רדע נ'פ'זי פ'נ נעל.
 eat-GENERIC-Q PR.GENERIC-how_many flower, CMP-NEAR fish cat PR.ANAPH_SUB >
 More fish eat flowers than cats.

Note that we place a clause whose argument is the generic pronoun before the comparative clause. From the dozan-clause, we refer to the function using the anaphoric pronoun referring to the position of the return value.

Table 4.8: Comparators in Middle Rymakonian.

□	Comparator
>	nef
<	αɔl
=	fen ^ɸ
≥	fʏl
≤	ɔɔj
≠	.ɔj
≈	pej
≫	α ^h e
≪	ɔɔn

4.5 | Ditransitive-like constructions

In English, some verbs such as *give* take two objects: the item being given and the recipient of the item. Because of Middle Rymakonian's heritage, this is translated into a compound statement:

ʃɔɪf ʃɔ ʃɔɔɔɔɔɔɔɔ, nebel ʃɔɔɔɔ.
 ʃɔɪf ʃɔ ʃɔɔɔɔɔɔɔɔ, nebel ʃɔɔɔɔ.
 lose-NEAR.PAST PR.NEAR DEF~book, give_to-ANAPH_SUB.PAST Ryze-ACC
 I gave the book to Ryze.

4.6 | Transitivity

Verbs that are used intransitively (i. e. have no object passed at this time) can be turned into a causative form with the prefix <ɸC->:

ʃɔɔɔɔ ɔɔɔɔɔɔɔɔ.
 fall-NEAR.PAST DEF~coin
 The coins fell.

ʃɔ ɸɔɔɔɔ ɔɔɔɔɔɔɔɔ.
 ʃɔ ɸɔɔɔɔ ɔɔɔɔɔɔɔɔ.
 PR.NEAR TRANS-fall-OTHER.PAST DEF~coin
 I dropped the coins.

Due to historical sound changes:

- An initial fricative or lateral fricative followed by a vowel is voiced.
- An initial <ɸ> followed by a vowel turns into <ɔ>.
- A word that started with <n^ɸ> in Lek-Tsaro but <n^ɔ> in Middle Rymakonian has the initial consonant revert to <n^ɸ>.

Note that the word order changes to SVO. (In this case, HCAs fall before S.) In addition, the verb is conjugated for its object, rather than the subject as expected. If

the following clause uses an anaphoric subject, it refers to the object of the current clause.

Moreover, the verb does not need to be one that can never take an object. In the above example, <ṛḥḥḥ> means “(S) falls on (O)”. However, if the verb in question is taking an object, it cannot be transitivised directly and a more roundabout way is required:

ṛḥḥḥ ḥḥḥḥḥḥ ḥḥḥ.

fall-NEAR.PAST DEF~coin grass

The coins fell on the grass.

ḥḥ ḥḥḥḥḥ ḥḥḥḥḥḥ, ṛḥḥḥ ḥḥḥḥḥ.

ḥḥ ḥḥḥḥḥ ḥḥḥḥḥḥ, ṛḥḥḥ ḥḥḥḥḥ.

PR.NEAR TRANS-fall-OTHER.PAST DEF~coin, fall-ANAPH_SUB.PAST grass-ACC

I dropped the coins; they fell on grass.

or: I dropped the coins on grass.

4.7 | The copula

The copula <j-> (v3) can take a noun as an object, in which case it can mean identity or membership. (Location is expressed with <l-> (v1) “be at”.) With no object at all, it is used to denote existence.

It can also accept a descriptor, in which case the descriptor is attached before <jcn> in the dictionary form. (This precedes phonorun reduction but forms a compounding boundary.)

5 | Descriptors

Descriptors act as adjectives or adverbs. They follow what they modify, and are inflected for the verbal person of their antecedents.

Modifying nouns is done through compounding, but there are special forms for modifying verbs. These are separate words.

Table 5.1: Descriptor declensions, using the descriptors $\langle \text{lef} \rangle$ “large” and $\langle \text{of} \rangle$ “old”.

Person	Declined form	
<i>Nouns</i>	ᵐᵉᵈᵛ (ᵐᵉᵈᵛ)	ᵐᵉᵛ (ᵐᵉᵛ)
Near	ᵐᵉᵈᵛᵛ (ᵐᵉᵈᵛᵛ)	ᵐᵉᵛᵛ (ᵐᵉᵛᵛ)
Far	ᵐᵉᵈᵛᵛ (ᵐᵉᵈᵛᵛ)	ᵐᵉᵛᵛ (ᵐᵉᵛᵛ)
Other	ᵐᵉᵈᵛᵛᵛ (ᵐᵉᵈᵛᵛᵛ)	ᵐᵉᵛᵛᵛ (ᵐᵉᵛᵛᵛ)
Anaph. Sub.	ᵐᵉᵈᵛᵛᵛ (ᵐᵉᵈᵛᵛᵛ)	ᵐᵉᵛᵛᵛ (ᵐᵉᵛᵛᵛ)
Anaph. Obj.	ᵐᵉᵈᵛᵛᵛᵛ (ᵐᵉᵈᵛᵛᵛᵛ)	ᵐᵉᵛᵛᵛᵛ (ᵐᵉᵛᵛᵛᵛ)
Generic	ᵐᵉᵈᵛᵛᵛᵛᵛ (ᵐᵉᵈᵛᵛᵛᵛᵛ)	ᵐᵉᵛᵛᵛᵛᵛᵛ (ᵐᵉᵛᵛᵛᵛᵛᵛ)

Note that a final <-j> or <-z> in a stem becomes whistled in the generic form.

6 | Tree mode

As mentioned in section ??, anaphoric referents in a linked-list sentence are sometimes insufficient for expressing complex sentence structures. While the easiest method of resolving this issue is using definite nouns, Middle Rymakonian also provides a mode where sentences are not linked lists of clauses, but rather (binary) trees.

6.1 | Activation

Tree mode is enabled automatically when the treeing particle <ᵿᵿ> is used, and disabled at the end of a sentence.

6.2 | Branch-switching

The aforementioned particle <ᵿᵿ> marks the beginning of the right branch of the tree. The right branch is ended by the particle <ᵿᵿΔ>, which causes the next clause to join the left and right branches.

(N. B. <ᵿᵿ> and <ᵿᵿΔ> can occur only between clauses. If the particles are represented by left and right brackets, respectively, then the brackets should match.)

6.3 | Anaphoric pronouns in joiner clauses

In clauses that join two branches, anaphoric pronouns require marking whether the antecedent occurs in the left predecessor <ᵿᵿ> or the right predecessor <ᵿᵿΔ>. This is done by marking the pronoun with <-ᵿ> or <-Δ>.

Likewise, verbs can be modified with <-ᵿ> or <-Δ> to indicate which branch the subject came from.

6.4 | Errors

The following are ungrammatical:

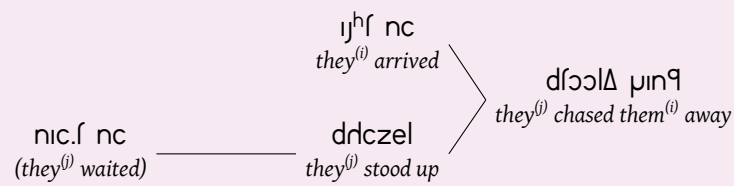
- Using the particle <ᵿᵿΔ> or the branched anaphoric pronouns when tree mode is disabled
- Using the particle <ᵿᵿΔ> other than to close a corresponding <ᵿᵿ>
- Using the unbranched anaphoric pronouns in clauses with two predecessors

- Using the branched anaphoric pronouns in clauses with one predecessor
- Starting a new branch with <ᵐᵃᵐᵃ> when the current branch is empty

6.5 | Example

ᵐᵃᵐᵃ ᵐᵃ, ᵐᵃᵐᵃ ᵐᵃ.ᶠ ᵐᵃ, ᵐᵃᵐᵃᶠ, ᵐᵃᵐᵃ ᵐᵃᵐᵃᶠ ᵐᵃᵐᵃ.
 ᵐᵃᵐᵃ ᵐᵃ, ᵐᵃᵐᵃ ᵐᵃ.ᶠ ᵐᵃ, ᵐᵃᵐᵃᶠ, ᵐᵃᵐᵃ ᵐᵃᵐᵃᶠ ᵐᵃᵐᵃ.
 go-NEAR.PAST PR.OTHER, BRANCH wait-NEAR.PAST PR.OTHER, stand_up-
 ANAPH_SUB.PAST,JOIN chase-ANAPH_SUB.PAST-RIGHT PR.ANAPH_SUB.ACC-LEFT
 When they⁽ⁱ⁾ arrived, they⁽ⁱ⁾ stood up and chased them⁽ⁱ⁾ away.

The resulting tree is shown below:



7 | Numerals

Unlike Lek-Tsaro, which used a downright unusual numbering system, Middle Rymakonian uses base 16 consistently.

7.1 | Irregular numerals

Here are the numerals that do not follow the usual pattern, before phonorun reduction:

Table 7.1: Irregular numerals.

base 10	base 16	word
0	0	μ3D
1	1	a3l
2	J	fij
3	?	Ω ⁴ on
4	0	a ⁴ μ
5	†	φcJ
6	ƒ	Dye
7	9	βcJ
8	Δ	dən
9	L	l ¹ ed
10	F	b3n ⁹
11	7	nə
12	£	le
13	#	j ^a cd
14	A	yin
15	V	f ⁴ el
16	10	.μ
17	11	l ¹ el
18	1J	l ¹ ela3l
19	1?	l ¹ el ¹ fij
33	J1	aDil
34	JJ	Dil
119	99	Dlβ
256	100	f ⁴ l ¹ a3
323	10?	l ¹ izil ¹ in

base 10	base 16	word
4199	10f9	l.ɔlə

Note that digits above 9 use capital haem letters.

7.2 | Double-digit numerals

Numerals of the form $x \cdot 16$ with $1 \leq x < 16$ are formed by concatenating $\langle .\mu \rangle x$. For instance, $128 = 80_{16}$ is written $\langle .\mu d \rangle n \rightarrow \langle .\mu \partial n \rangle$.

Numerals for integers of the form $x \cdot 16 + y$ with both x and y between 1 and 15, inclusive, and not listed in table 7.1, are formed by concatenating $x \langle \mu \rangle y \langle \mu \rangle$ (before PR). For instance, $89 = 59_{16}$ is written $\langle \varphi c j \mu l \partial \mu \rangle \rightarrow \langle \varphi c j \mu l \partial \mu \rangle$.

7.3 | Numerals up to 4096

Numerals for integers of the form $x \cdot 256 + y$ with $0 \leq x < 16$ and $0 \leq y < 256$, and not listed in table 7.1, are formed by concatenating $y \langle \mu l \partial \rangle x$. This is done after phonorun reduction. For instance, $2018 = 7E2_{16}$ is written $\langle \varphi i n \mu \mu \mu \mu \mu \mu l \partial \mu \rangle$.

Note that there is no special case for $y = 0$; $512 = 200_{16}$ is written $\langle \mu \partial \mu l \partial \mu \rangle$.

7.4 | Larger numerals

Multiples of 4096 (up to 65536) are written by concatenating $\langle .l \rangle x$ before phonorun reduction: $8192 = 2000_{16}$ is written $\langle .l \rangle \mu \mu \mu \mu$. The exception is 4096 itself, which is $\langle .l \rangle \mu$.

Then other numerals up to 65536 are written as a conjunctive phrase: $10000 = 2710_{16}$ is written $\langle .l \rangle \mu \mu \mu \mu \text{ an } .\mu \mu l \partial \mu \rangle = 2 \cdot 4096 + 16 + 7 \cdot 256$.

8 | Derivational morphology

The following methods are used to derive related terms from existing ones.

8.1 | Abstraction

Abstraction is a derivation that takes a non-abstract noun and returns the abstract noun representing the concept of the argument. Before pronoun reduction, this formation appends $\langle -ne \rangle$ or $\langle -n \rangle$ to the noun. In addition, any final fricatives or lateral fricatives after a vowel are voiced, and a final $\langle \mu \rangle$ after a vowel is changed to $\langle z \rangle$.

Examples:

- $\langle l^l \mu c n \rangle$ *book* \rightarrow $\langle l^l \mu c n e n e \rangle$ *literature*
- $\langle l^l \nu \nu \rangle$ *cart* \rightarrow $\langle l^l \nu \nu n \rangle$ (\rightarrow $\langle l^l \nu \nu n \rangle$) *transportation*
- $\langle \nu c \mu \rangle$ *hand* \rightarrow $\langle \nu c z n e \rangle$ *technique*

8.2 | Dematuration

Dematuration is a derivation that takes a noun and returns a noun of the same class that represents an immature form of the argument (not necessarily a diminutive). $\langle l^l c - \rangle$ or $\langle f \theta - \rangle$ are prepended to nouns that begin in $\langle j \rangle$, $\langle l \rangle$ or $\langle j^o \rangle$, or $\langle j c - \rangle$ or $\langle j \theta - \rangle$ otherwise. In addition, an initial fricative or lateral fricative before a vowel is voiced, and an initial $\langle \mu \rangle$ before a vowel is changed to $\langle z \rangle$.

Examples:

- $\langle \nu \nu \nu \rangle$ *person* \rightarrow $\langle j c \nu \nu \nu \rangle$ *child*
- $\langle l^l \nu z \theta \rangle$ *fruit* \rightarrow $\langle j \theta l^l \nu z \theta \rangle$ (\rightarrow $\langle j \theta l^l \nu z \theta \rangle$) *unripe fruit*
- $\langle j e r l i c n \rangle$ *essay* \rightarrow $\langle l^l c z e r l i c n \rangle$ *draft*

8.3 | Verb-to-noun conversions

To derive a noun from a verb, an affix is added to the verb stem:

Table 8.1: Conversion affixes.

Name	Affix
Agent	–en ^ϕ / –ɔn ^ϕ
Patient	–ed / –ɔd
Location	–eμ / –ɔμ
Instrument	–ɪ ^β

Then the resulting word is declined as an abstract noun, and phonorun reduction happens. After phonorun reductions, the order of phonoruns is reversed, such that the last phonorun becomes the first, for instance. Finally, the final phonorun is continued by appending <–c> or <–ɿ>.

The following words are derived from <nəb–> (v2) *to steal*:

- Agent: <nəbɔn^ϕ> → <ɔn^ϕbnəc> *thief*
- Patient: <nəbɔd> → <nəɔbd> → <bdnəɔc> *stolen goods*
- Location: <nəbɔμ> → <ɔμbnəc> *site of theft*
- Instrument: <nəbɪ^β> → <nəɪb^β> → <b^βnəɪc> *tools used for theft*

Occasionally, a word derived by this method might become lexicalised. In that case, it moves to the noun class of best semantic fit and its declension is regularised (based on the nominative form).

9 | Names

Names fall into two grammatical categories:

- *Nominal names* act as nouns. They are usually single words.
- *Clausal names* are entire clauses. These names usually refer to places, although a few people have clausal names. In extreme cases, such a name can span multiple clauses.

9.1 | Nominal names

These names act as nouns, and they are preceded by a backslash <\>. If the name spans multiple words (as common in foreign names), spaces are escaped by backslashes. No distinction is made between native and foreign names.

Only personal names can stand on their own, and even then, only given or full names. Other names must modify a common noun describing the nature of what is named, in the integral number without definiteness.

Table 9.1: Some examples of nominal names.

Name	Type
\pʒze	Personal (native)
\iʒɜl	Personal (native)
\pedɔn	Personal (foreign)
dʒede-\oɪɪ.c	Place (foreign)

Native names will usually respect vowel harmony. Children of parents who work in professions demanding physical labour (e. g. bricklaying) will usually have names with back vowels. In contrast, those born to parents of professions that do not demand physical strength (e. g. computer programming) will usually bear names with front vowels.

In addition, native names tend to undergo sound changes from Lek-Tsaro to Middle Rymakonian, but foreign names given when Lek-Tsaro was still spoken retain Lek-Tsaro forms, but with the following vowel replacements (and, of course, orthographic changes) – see table 9.2.

In phonorun reduction, foreign names are not affected by metathesis.

Table 9.2: Lek-Tsaro to Middle Rymakonian correspondences for foreign names.

Middle Rymakonian	From these vowels in Lek-Tsaro
ɪ	ɪ ɔ̯ ^e
e	e e ^{ɔ̯} ɔ̯ ^{ɔ̯}
c	c c ^a
ɔ̯	ɔ̯ ə ^{ɔ̯}
ə	ə ^c ə

9.2 | Clausal names

These names comprise of one or more clauses. Due to the nature of clausal names, they are all considered native. However, almost all except the newest clausal names are frozen and might not be valid clauses in Middle Rymakonian; usually, they are Lek-Tsaro clauses with the vowel replacements outlined in table 9.2.

Most of these names refer to places; personal clausal names are almost always nicknames or such. Orthographically, they are put into square brackets <[]>.

Clausal names are used by saying them as their own clauses, then using an anaphoric pronoun to backreference the entity described by the name in question. The type of anaphoric pronoun used varies from name to name. It might be the anaphoric subject pronoun, the object pronoun or the last-clause pronoun.

We call the *referent* the subject, the object or the verb of the last clause, respectively depending on the type of anaphoric pronoun used to refer to the name. If the referent is a noun, it must be declined in the integral number without definiteness.

Here, as common in maps and such, the referent will be capitalised. However, other contexts that make the type of anaphoric pronoun to use clear do not use this type of capitalisation.

Table 9.3: Some examples of clausal names.

Name	Type	Literal meaning
[AEX4€ dɪɪʃɪ ʃɔɔɔ]	Place	The trees <i>covered</i> the ground
[ɔ̯əɪ ɸXEDƏ ɸɔ̯ɪ-\\ɪəɸe]	Place	The <i>city</i> remembers the Šedri (Šedrý) star
[ac ɪɸɪə-Dɪ jɔ̯ jəɸ j ^h ɪ.en-Dɪ jɔ̯ ɪɪə, ɸəɪjɔ̯.eɪ ɸXEDƏD]	Place	The <i>city</i> was founded by the warrior of the sun and the wizard of the moon
[Dezi \\ʃETɔ̯F jɔ̯ɪ-l ^l eɪ]	Personal	<i>Gulto</i> takes care of 17 foxes

An example of usage:

[ɔ̯əɪ dɸedə ɸɔ̯ɪ-\\ɪəɸe], n.ɪ bɪnən-.cɪjɸɪ j^he dɪdɪzɪ ɸɪ.
 (name), in_time year-next go-ANAPH_SUB DEF~person PR.ANAPH_SUB
 He will go to Muta Pröme Ryk-Šedrý next year.

Romanisation

In this text, the romanisation is used only to transcribe names into English. Whenever possible, the hacmisation should be used.

Table 4: The consonants of Middle Rymakonian.

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Nasal	m		n	ɲ	ŋ	
Plosive	p b		t d	tʃ dʒ	k g	ʔ
Fricative	f v	θ ð	s z	ʃ ʒ	h ɦ	
(coarticulated)	fh vɦ	ɸh ðɦ		fʃ vʒ		
(whistled)			ʂ ʐ			
Affricate			c	č		
Lateral fricative			ɬ ɮ			
Approximant			r	j	w	
Lateral approximant			l			
Tap			ɾ			

Table 5: The vowels of Middle Rymakonian.

	Front	Central	Back
High	i	y	u
Mid	e		o
Low		a	

The digraphs <fh vɦ ɸh ðɦ fʃ vʒ ts tʃ> correspond to coarticulated consonants and affricates. An apostrophe can be placed between the two letters if this is not desired.

Rod signs are represented by the Arabic digits <1 2 3 4 5 6 7 8> attached to the end of the verbs they encompass. Halfway rod signals are represented by subscript digits <₄>. Transitions from the ninth rod signal are written <9⁷ 9⁸>. Proper words are preceded by a backslash <\>.

<ɲ> should be capitalised as <Ŋ> only if one can depend on the majuscule glyph appearing like an N with a hook. Otherwise, it should be spelled <Ng>.

A | List of glossing abbreviations

An asterisk indicates that this value is unmarked.

Abbr	Definition
<i>Case</i>	
NOM*	Nominative
ACC	Accusative
GEN	Genitive (this is a clitic and not a case <i>per se</i>)
<i>Number</i>	
DIR*	Direct
INV	Inverse
ND*	Nondual
DU	Dual
<i>Person</i>	
NEAR	Near
FAR	Far
OTHER	Other
ANAPH_SUB	Anaphoric subject
ANAPH_OBJ	Anaphoric object
GENERIC	Generic
<i>Definiteness</i>	
INDEF*	Indefinite
DEF	Definite
<i>Tense</i>	
NONPAST*	Nonpast
PAST	Past
<i>Tellicity</i>	
TELIC*	Telic
ATELIC	Atelic
<i>Polarity</i>	
POS*	Positive
NEG	Negative
Q	Interrogative
<i>Aspect and connector type names are not abbreviated.</i>	
<i>Connector parity</i>	
0	Even
1	Odd
<i>Comparisons</i>	

Abbr	Definition
CMP	Comparative
<i>Comparators are glossed using their respective operator symbols.</i>	
<i>Transitivisation</i>	
TRANS	Transitivised
<i>Tree mode</i>	
BRANCH	Create a new branch ($\langle n^u \uparrow \rangle$)
JOIN	Join two branches ($\langle n^u \Delta \rangle$)
LEFT	Refer to left branch ($\langle - \uparrow \rangle$)
RIGHT	Refer to right branch ($\langle - \Delta \rangle$)

B | Dictionary

An entry looks like this:

ᄁᄁᄁ– v1 (S) eats (O)

From left to right:

1. The entry – the Middle Rymakonian term listed.
2. The part of speech of the corresponding entry:
 - *n* – a noun
 - *-d-* – inherently dual
 - *-sent* – sentient noun
 - *-nonsent* – nonsentient noun
 - *-meas* – measure noun
 - *-edib* – edible noun
 - *-ined* – inedible noun
 - *-abst* – abstract noun
 - *v1, v2, v3* – first-, second- and third- conjugation verbs
 - *desc* – a descriptor
 - *pp* – a preposition
 - *-(b)* – this entry has only neutral vowels but acts as if it had back vowels
 - *-(ŋ)* – this entry came from a word that started with <ŋ⁰–> and thus certain prefixes will revert it back
3. The definition – the gloss for the corresponding entry.
 - (S) – subject
 - (O) – direct object
4. If applicable, any special grammatical or semantic notes for this term.
5. Optionally, examples of usage.

| .

.c)jμ– *desc* new, next

.cdeŋ *nonsent* house

| ɾ

ɾlezc *nsent* child (young person)

ɾuŋ^ɸ *nonsent* cloud

ɾɸ- v1 lose an object

ɾaɬ *nonsent* tree

ɾoɬɸ *nonsent* bed

ɾaɬɸ *nonsent* bedroom

ɾlə *nedib* ice

ɾləɸ^ɾ *nedib* frost

ɾeɸ.c *nedib* beef

| ɾʰ

ɾʰzcɟ *nonsent* river

ɾʰɸ- v1 (S) fights (O)

ɾʰcɾ- v3 (S) falls on (O)

ɾʰcɸd- v3 (O) breaks (S)

ɾʰaɬ *nonsent* flower

ɾʰel *nsent* who?

| ɸ

ɸɬɸ- *desc* handsome, beautiful

ɸcɸ^h- v1 (S) follows (O)

ɸaɬ *nonsent* fruit

| ɿ

ɿɸɸ *nonsent* window

ɿɸ *pp* in, on, at (location)

ɿɿ- v1 (S) lives in (O)

ɿɸ *nonsent* stairs

ɿɿ *nmeas* 1/23 of a tidal day

ɿɿ *nonsent* moon

ɿɿɿ *nined* stone

ɿɿ- *desc* entire, complete

ɿɿ- *desc* old

| ɿʰ

ɿʰɸcɿ *nonsent* book

ɿʰɿ *nonsent* cart

| ɿ

ɿcɿ- v1 (S) shoots an arrow to (O)

| ɿʰ

ɿʰɿɿ *nedib* soup

ɿʰɿe *nonsent* fish

| ɿ

ɿ- v3 copula

ɿɿ *nonsent* fox

ɿcɿe *nabst* dawn, wee hours

ɿeɿe *nonsent* land, country

ɿeɿ- v1 (S) is worried by (O)

ɿeɿɿcɿ *nsent* essay

| ɿ^a

ɿ^aɿeɿ *nsent* magician

ɿ^aɿ- v3 (S) creates, makes (O)

ɿ^acɿ *nabst* how many?

| ɿ^h

ɿ^h *pp* toward

ɿ^h- v1 (S) goes toward (O)

ɿ^hɿ *pp* written by

| n

n.ɿ *pp* in, on, at (time)

n.ɸ *pp* through

nɿɿ *nonsent* cat

nɿ- v3 (S) waits for/until (O), temporal verb, if

nɿ.eɿ- v3 (S) covers, spans (O)

nɿɿ- v3 (S) dances around (O)

nɿb- v1 (S) gives something to (O)

nɿɸa- v3 (S) hides from (O)

nɿn- v2 (S) kills (O), (O) dies

nɿb- v2 steal

| **ᠨᠠ**

ᠨᠠᠵᠠ– v1(ᠡ) (S) thinks, ponders
about (O)

| **ᠠ**

ᠠᠡᠨᠠᠭᠡ *nnon*sent coin
ᠠᠴᠤᠴᠤ *nabst* centre, origin
ᠠᠴᠤᠨ *pp* according to
ᠠᠴᠤᠭᠡ *nabst* light
ᠠᠴᠤᠭᠡᠨᠠᠴᠤ *nabst* moonlight
ᠠᠭᠡ– v3 jump

| **ᠠᠯ**

ᠠᠯ– v3 do what?
ᠠᠯᠵᠠᠮᠤ *nedib* potable water

| **ᠠᠬ**

ᠠᠬᠢᠳᠤ *nabst* empathy

| **ᠳ**

ᠳᠤ *pp* far away from
ᠳᠠᠨᠭᠠᠵᠠ *nnon*sent rabbit
ᠳᠠᠵᠢᠳᠤ *nsent* nobleman, gentleman
ᠳᠠᠯ– v1 (S) eats (O)
ᠳᠠᠨ *nedib* rice
ᠳᠠᠵᠤ *nsent* person
ᠳᠴᠤᠯ *desc* far
ᠳᠴᠤᠨ *nnon*sent border, boundary
ᠳᠴᠤ *ndnon*sent hand
ᠳᠴᠤᠨᠡ *nabst* technique
ᠳᠴᠣᠰ– v2 (S) produces, makes (O)
ᠳᠴᠣᠨᠭᠡ *nnon*sent head
ᠳᠡᠯᠢᠨ *nmeas* hour
ᠳᠡᠨᠴᠣ– v1 begin, start
ᠳᠡᠳ– v3 err, miss
ᠳᠡᠪᠣ– v1 (S) resembles (O)
ᠳᠡᠵ– v3 (S) raises, takes care of,
tends to (O)
ᠳᠡᠯ *nmeas* volume
ᠳᠡᠯᠢ– v3 (S) imitates (O)
ᠳᠡᠯᠠᠨᠭᠡ *nsent* servant

| **ᠨ**

ᠨᠠᠵᠠ *nnon*sent wall
ᠨᠠᠴᠣ– v1 (S) hits, strikes (O)
ᠨᠠᠵᠠ– v2 comparative verb
ᠨᠡᠳ– v1 (S) sleeps
ᠨᠡᠳ– v1 (S) sleeps
ᠨᠡᠵᠠ *nnon*sent pathway, street,
road

| **ᠰ**

ᠰᠣᠴᠣᠨ– v3 (S) lowers their own (O)
ᠰᠣᠯᠢ– v1 (S) raises their own (O)
ᠰᠣᠮᠠᠨᠭᠡ *nnon*sent frog

| **ᠳ**

ᠳᠠᠨᠭᠤᠨ *ndnon*sent(b) knee
ᠳᠣᠴᠤ *nabst* ability, potential, pos-
sibility
ᠳᠣᠯᠢᠭᠤᠨᠭᠡ *nnon*sent mist, fog
ᠳᠣᠯᠢᠨ *nabst* ground, floor
ᠳᠣᠴᠠ– v1 stand, get up
ᠳᠤ *pp* with (comitative)
ᠳᠤ– v3 hold, carry, instrumental
verb
ᠳᠤᠡᠳᠡ *nnon*sent city
ᠳᠢᠰᠤ– v1 (S) sits at (O)
ᠳᠠᠴᠣ– v2 (S) chases away (O), (O)
flees from (S)

| **ᠪ**

ᠪᠢᠨᠡᠰ *nmeas* year

| **ᠠ**

ᠠ– v1 (S) sees (O), because, (S) illu-
minates (O)

| ρ

ρld *pp* with (colour) hair

ρ3λ nabst nighttime

ρ3j nnonseñt cup

ρn *pp* with (instrumental)

ρu *pp* in front of

ρ3D3 nmeas day (continuous)

ρlf nined grass

ρl- v1 (S) climbs, rises in (O)

ρld nnonseñt hair

ρeu- v3 (S) spreads (O)

ρea- v3 (S) speaks to (O), (S) asks
(O)

ρell nnonseñt place

ρelluc.cl nnonseñt hometown,
home village, (figurative) Rymako

ρəf nined gold