








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

Middle Rymakonian, the language of Rymako

uruwi

[illegible]

α^hω^e.ωnφ-Debc-delbe^o flelc^a

A complete grammar

12 January 2018

Dedicated to Gufferdk.

Branch: canon

Version: 0.1

Date: 2017-12-22 (29 dia len)

(C)opyright 2017 Uruwi. See README.md for details.

| Contents

0.1	Introduction	4
1	Phonology and orthography	5
1.1	Phoneme inventory	5
1.2	Hacmisation	6
1.3	Phonotactics	7
1.3.1	Prosody	8
1.4	Vowel harmony	9
2	Syntax	11
2.1	Basic word order	11
2.2	Questions	11
2.3	Multiple clauses	11
3	Nouns	13
3.1	Number	13
3.2	Case	13
3.3	Noun classes	13
3.4	Definiteness	14
3.5	Declension table	14
3.5.1	Countable classes	14
3.5.2	Measurable and uncountable classes	14
3.6	Pronouns	15
3.6.1	Last-clause pronouns	16
3.7	Compounding	16
3.8	Possession	16
4	Verbs	19
4.1	Aspect	21
4.2	Historically clausal arguments	22
4.2.1	Obliques	22
4.2.2	Conjunctions	22
4.3	Connectors	23
4.4	Comparatives	24
4.5	Ditransitive-like constructions	25
4.6	Transitivisation	25
4.7	The copula	26

- 5 Descriptors 27
- 6 Tree mode 29
 - 6.1 Activation 29
 - 6.2 Branch-switching 29
 - 6.3 Anaphoric pronouns in joiner clauses 29
 - 6.4 Errors 29
 - 6.5 Example 30
- 7 Numerals 31
 - 7.1 Irregular numerals 31
 - 7.2 Double-digit numerals 32
 - 7.3 Numerals up to 4096 32
 - 7.4 Larger numerals 32
- A Dictionary 35

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>
$\eta \rightarrow \text{j}\eta$	$(\square\blacklozenge)$	
$\theta x \rightarrow \theta$	$\neg(\blacklozenge\square)[x = \emptyset]$	
$C_1[+fr] \rightarrow C_1[+v]$	$(V_1\blacklozenge V_2)$	
$\text{ɹ} \rightarrow z$	$(V_1\blacklozenge V_2)$	
$\{x, u\} \rightarrow \text{ɥ}$		
$V_1[+r] \rightarrow V_1[-r]$		
$k \rightarrow c$	$(\blacklozenge i)$	
$t \rightarrow \text{tʃ}$	$(\blacklozenge i)$	
$r \rightarrow \text{r}$		

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 ʣ			
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.

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.

Table 1.3: The consonants of Middle Rymakonian.

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Nasal	ɒ		n	n ^ɥ	n ^ɸ	
Plosive	d b		f ɳ	f ^ɥ ɳ ^ɥ	ɭ ɸ	.
Fricative	ɑ u	j ^a z ^u	j z	l s	ɭ ^l ɸ ^s	
(coarticulated)	ɑ ^h u ^h	j ^h z ^h		ɑ ^l u ^s		
(whistled)			j ^o z ^o			
Affricate			ɸ	ɸ ^l		
Lateral fricative			l ^l s ^l			
Approximant			ɸ	ɥ	o	
Lateral approximant			l			
Tap			ɳ			

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. 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 <ɭ^l l^l>, for instance.

Table 1.4: The vowels of Middle Rymakonian.

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

1.3 | Phonotactics

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

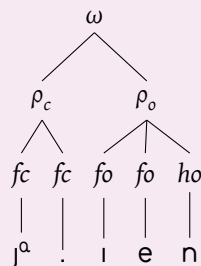
Table 1.5: Categories of phonemes.

Category	Phonemes
Full-open	ɪ e ɔ ə u z ^u z z ^o s ʃ ^s s ^l ɥ o ʔ ɪ
Half-open	ɜ μ ɪ ɒ n n ^u n ^o ɣ
Neutral	ɹ j ^o l ⁱ u ^h z ^h u ^s ɭ ɭ
Half-closed	ɑ ɛ ɹ ^l ɹ ^h Δ
Full-closed	j ^a a ^h j ^h a ^l d b ɾ ɳ ɳ ^u ɳ ^o ɳ ^l ʋ ʋ ^l . ʔ ʈ

These are converted into *actual categories* as follows:

- 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 $\langle \text{J}^{\text{a}}.\text{ien} < \text{xJ}^{\text{h}}.\text{ien} \rangle$:



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:

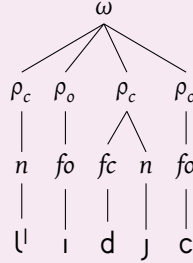
$$\begin{aligned}
 X_1[do]X_2[dc]R[do] &\rightarrow X_2X_1R \\
 X_1[dc]X_2[do]R[dc] &\rightarrow X_2X_1R \\
 X_1[dc]X_2[do]?X_3[do] &\rightarrow X_1?X_2X_3 \\
 X_1[do]?X_2[do]X_3[dc] &\rightarrow X_1X_2?X_3 \\
 X_1[op \geq 0]X_2[dc]X_3[do]X_4[op \leq 0] &\rightarrow X_1X_3X_2X_4 \quad [X_1.op + X_3.op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

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, $\langle xj^a.en \rangle$ had $4 > \lceil 5/2 \rceil$ phonoruns, so the third rule was applied. This changed the word into $\langle j^a.en \rangle$, 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 $\langle l^l d j c \rangle$ *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 $\langle l^l d j - \rangle$, 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 <ɕ e> are front vowels, <ə ɔ> are back vowels and <ɪ ʌ> 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.

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: <xμ3D3> “day (continuous)”	
Nominative	μ3D3 (μ3D3)
Accusative	μ3D3n (μ3D3n)
Measure: <xDeI> “volume” (in expressions such as <xDeI–ɥ3ɔ> “cupful”)	
Nominative	DeI (DeI)

	Direct
Accusative	bezcñ (bezcn)
Edible: <xfeµ.c> “beef”	
Nominative	feµ.c (feµc.)
Accusative	feµ.cn (feµc.n)
Edible: <xðin> “rice”	
Nominative	ðin (ðin)
Accusative	ðincñ (ðincn)
Inedible: <xµəfə> “gold”	
Nominative	µəfə (µəf)
Accusative	µəfəbe (µəfbə)
Inedible: <xlɔɲ> “stone”	
Nominative	lɔɲ (lɔɲ)
Accusative	lɔɲde (lɔɲde)
Abstract: <xəḥəðə> “empathy”	
Nominative	əḥəðə (əḥəðə)
Accusative	əḥəðəñ ^ʰ (əḥəðəñ ^ʰ)
Abstract: <xφɕ> “[the number] five”	
Nominative	φɕ (φɕ)
Accusative	φɕzcn ^ʰ (φɕzcn ^ʰ)
Here, the final consonant is voiced if it is a fricative.	

(NB: be sure to change any <ɭ> and <ɮ> into <ɭʰ> and <ɮʰ> respectively before <ç>.)

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-ɑ¹ɜμə-φcɟ
 volume-cup-water-five
 five cupfuls of water

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

del-μɜɟɔ-ɑ¹ɜμə-φcɟ-fi
 volume-cup-water-five-PR.NEAR.NONDUAL
 (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-lfəi
 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 ɪ.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 <ɖil-> “(S) eats (O)”, before and after phonorun reduction.

	Nonpast	Past
Near	ɖilɪn (ɖilɪn)	ɖilɪf (ɖilɪf)
Far	ɖilɪn (ɖilɪn)	ɖilɜj (ɖilɜj)
Other	ɖilɪ (ɖilɪ)	ɖilɜ (ɖilɜ)
Anaph. Sub.	ɖile (ɖile)	ɖilel (ɖilel)
Anaph. Obj.	ɖilc.e (ɖil.ce)	ɖilc.el (ɖil.cel)
Generic	ɖilc (ɖilc)	ɖilc (ɖilc)

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 / –ɔ	–l ¹
Atelic	–DC / –Də	–ɟ	–ɜ

Some examples:

ɖilɪn l¹ɪde f⁴ɔɜ.
eat-NEAR.NONPAST fish flower
Fish eat flowers.

ɖilɪn l¹ɪde f⁴ɔɜ, ɖilɪn nɟɪzɪ ɟɪ.
eat-NEAR.NONPAST fish flower, eat-NEAR.NONPAST cat PR.ANAPH_SUB
Fish eat flowers, and cats eat fish.

ɖilɪn l¹ɪde f⁴ɔɜ, ɖɪn ɟɪfɪbe.
ɖilɪn l¹ɪde f⁴ɔɜ, ɖɪle ɟɪfɪbe.
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.)

ɖilɪnef⁴ f⁴ɔɜ l¹ɪde.
ɖilɪnf⁴e f⁴ɔɜ l¹ɪde.
eat-NEAR.NONPAST-NEG flower fish
Flowers don’t eat fish.

ɖɟcn nc l¹ɟɟl¹ɟcnɛn, ɟɛnɪn lɪ eɟɟ.
ɖɟcn nc l¹ɟɟl¹ɟcnɛn, ɟɛnɪn lɪ eɟɟ.
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.

ɖɟcnɪl¹ nc l¹ɟɟl¹ɟcnɛn, ɟɛnɪn lɪ eɟɟ.
ɖɟcnɪl¹ nc l¹ɟɟl¹ɟcnɛn, ɟɛnɪn lɪ eɟɟ.
carry-NEAR.NONPAST-INTERROGATIVE 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	–1	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	ʃc11	An action that was interrupted.
Perfect	–1	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	–ʔ	A general truth or aphorism, or an action done habitually.
Gnomic dubitative	ʃc1ʔ	A general truth or aphorism that the speaker considers to be false.
Deontic necessity	–ᵐ	An action that the speaker insists on happening.
Epistemic necessity	1əᵐᵐ	An action that the speaker infers is happening.
Deontic potential	–ʔ	An action that the speaker permits to occur.
Epistemic potential	1əᵐʔ	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	ʃc1	Indicates that the subject comprises not only of what is explicitly mentioned, but also other things.
Nonexclusive object	cʃʔ	Indicates that the object comprises not only of what is explicitly mentioned, but also other things.
Nonexclusive argument	cʃᵐᵐ	Combination of both nonexclusive subject and nonexclusive object.

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:

ʃililɸɸc1 ʃi nc, lcnc.elʃ dʒnʷiua–mɪ.
 ʃililɸɸc1 ʃi nc, lcnc.elʃ dʒnʷiua–mɪ.
 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.

4.2 | 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 ʃuɔɔ neɸae1 ʃin ʋɸze
 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 <ɸɸ> (from Lek-Tsaro <ɸɸcn> *hold, carry*, which also begets <ɸɸn>), but now we have nested obliques, which means we need to use <ɪn> as a postposition:

ʃuɔɔ ɸɸ ʃɸzə ɪnɸ neɸae1 ʃin ʋɸze
 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 <–ɸ>, and those that end with an open phonorun receive <–z>.

The prefix <ɸɸ–> 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:

ʋɸze an ʃizɔɔ dɪɸ ʃɸc..
 ʋɸze an ʃizɔɔ dɪɸ ʃɸc.

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:

\p3ze an \fız3l feɸc. an l'ıdjɔ ɔıel.

\p3ze an \fız3l feɸc an l'ıdjɔ ɔıle.

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:

nɥızi an-ləı ɔ3nɸɔ

nɥızi an-ləı ɔ3nɸɔ

cat and-old rabbit

old cats and rabbits

4.3 | Connectors

(This section will refer to section 2.11 of \qbl ɔ ɔlɔ /fɔ'\nnɸln 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 4.6) 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 <-f> or <-l> if the *type* ends with a closed phonorun, and <-ı> or <-z> 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*

Table 4.6: Connector types.

Name	Arity	Middle Rymakonian	Explanation
Ordinary	n	lj–	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	id–	“ α but β .”
Augmentative	n	ɔψ ^s –	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 .”

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

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

ɔljɔl ʔɪde ʔɪzɔ ɪjei.
 ɔljɔl ʔɪde ʔɪzɔ ɪjei.
 eat-NEAR.PAST fish flower ORDINARY-⟨e⟩-0
 The fish ate the flower.

ɪjei nɔɔɔɔ ʔɪdeɔ ʔɪzɔ.
 ORDINARY-⟨e⟩-0 dance-NEAR.PAST child tree
 Then the child danced around the tree.

ɪjei ɔɪɪɪ ʔɪɪɪɪɪɪ.
 eat-ANAPH.SUB.PAST ORDINARY-⟨e⟩-0 DEF~fish-ACC
 Then the child ate the fish.

ɔɪɪɪɪ ɔɪɪɪɪ ɪjeɪ ɔɪ.
 ɔɪɪɪɪ ɔɪɪɪɪ ɪjeɪ ɔɪ.
 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:

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 <ᵐᵉᵈᶠ-⟩ “large” and <ᵐᵉᶠ-⟩ “old”.

Person	Declined form	
<i>Nouns</i>	ᵐᵉᵈᶠᵐ (ᵐᵉᵈᵐᵐ)	ᵐᵉᶠᵐ (ᵐᵉᶠᵐ)
Near	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)
Far	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)
Other	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)
Anaph. Sub.	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)
Anaph. Obj.	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)
Generic	ᵐᵉᵈᶠᵐᵐ (ᵐᵉᵈᵐᵐᵐ)	ᵐᵉᶠᵐᵐ (ᵐᵉᶠᵐᵐ)

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:

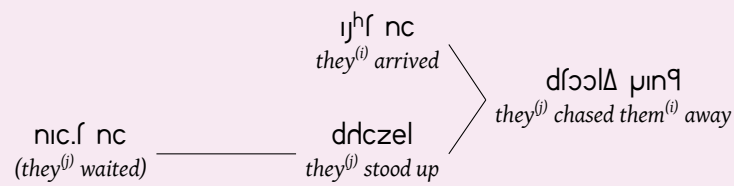
- Using the particle <ᵿᵿΔ> or the branched anaphoric pronouns when tree mode is disabled
- Using the particle <ᵿᵿΔ> other than to close a corresponding <ᵿᵿ>
- Using the unbranched anaphoric pronouns in clauses with two predecessors

- 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	?	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 izifin

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 $\langle \phi c j \mu l \rangle e d \mu \rightarrow \langle \phi c j \mu l \rangle d e \mu$.

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 $y \langle \mu l \rangle a \rangle x$. This is done after phonorun reduction. For instance, $2018 = 7E2_{16}$ is written $\langle \mu l \rangle a \rangle c \beta j \rangle$.

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

7.4 | Larger numerals

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

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

Romanisation

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

Table 2: 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	ph ðɦ		fʃ vʒ		
(whistled)			ʂ ʐ			
Affricate			c	č		
Lateral fricative			ʂ ʐ			
Approximant			r	j	w	
Lateral approximant			l			
Tap			ɾ			

Table 3: The vowels of Middle Rymakonian.

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

The digraphs <fh vɦ ph 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. 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 | 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

.cDen *nonsent* house

| ʀ

ʀlezc *nsent* child (young person)

ʀµin⁹ *nonsent* cloud

ʀiφ- v1 lose an object

ʀʊʊ *nonsent* tree

ʀʊʊʀi *nonsent* bed

ʀʊʊʀ *nonsent* bedroom

ʀʌ *nedib* ice

ʀʌʀʀ *nedib* frost

ʀeµ.c *nedib* beef

| ʀʀ

ʀʀʌʌ *nonsent* river

ʀʀʀ- v1 (S) fights (O)

ʀʀʀ- v3 (S) falls on (O)

ʀʀʀ- v3 (O) breaks (S)

ʀʀʀ *nonsent* flower

ʀʀ *nsent* who?

| ʀʀ

ʀʀʀ- *desc* handsome, beautiful

ʀʀʀ- v1 (S) follows (O)

ʀʀʀ *nonsent* fruit

| ʀʀ

ʀʀʀ *nonsent* window

ʀʀ *pp* in, on, at (location)

ʀʀ- v1 (S) lives in (O)

ʀʀ *nonsent* stairs

ʀʀ *nmeas* 1/23 of a tidal day

ʀʀ *nonsent* moon

ʀʀʀ *nined* stone

ʀʀ- *desc* entire, complete

ʀʀ- *desc* old

| ʀʀ

ʀʀʀ *nonsent* book

| ʀ

ʀʀ- v1 (S) shoots an arrow to (O)

| ʀʀ

ʀʀʀ *nedib* soup

ʀʀʀ *nonsent* fish

| ʀʀ

ʀ- v3 copula

ʀʀʀ *nabst* dawn, wee hours

ʀʀʀ *nonsent* land, country

ʀʀ- v1 (S) is worried by (O)

| ʀʀ

ʀʀʀ *nsent* magician

ʀʀʀ- v3 (S) creates, makes (O)

ʀʀʀ *nabst* how many?

| ʀʀ

ʀʀ *pp* toward

ʀʀ- v1 (S) goes toward (O)

ʀʀʀ *pp* written by

| ʀʀ

ʀʀ *pp* in, on, at (time)

ʀʀ *pp* through

ʀʀʀ *nonsent* cat

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

ʀʀʀ- v3 (S) covers, spans (O)

ʀʀʀ- v3 (S) dances around (O)

ʀʀ- v1 (S) gives something to (O)

ʀʀʀ- v3 (S) hides from (O)

ʀʀʀ- v2 (S) kills (O), (O) dies

| ʀʀ

ʀʀʀ- v1(ʀ) (S) thinks, ponders about (O)

| a

aqen^{4e} *nnon*sent coin
 ac.c) *nabst* centre, origin
 ac.jn *pp* according to
 acze *nabst* light
 acze)nc *nabst* moonlight
 aeo- *v3* jump

| a^l

a^l- *v3* do what?
 a^l3pə *nedib* potable water

| a^h

a^həɔɔ *nabst* empathy

| D

D) *pp* far away from
 D3n^ɔ *nnon*sent rabbit
 D3idp *nsent* nobleman, gentleman
 D)l- *v1* (S) eats (O)
 D)n *nedib* rice
 D)z) *nsent* person
 DCl) *desc* far
 Dcp *ndnon*sent hand
 D3f- *v2* (S) produces, makes (O)
 D3n^ɔ *nnon*sent head
 Del)n *nmeas* hour
 Denf- *v1* begin, start
 Ded- *v3* err, miss
 Debq- *v1* (S) resembles (O)
 Del *nmeas* volume
 Dell- *v3* (S) imitates (O)
 Də)ɔn^ɔ *nsent* servant

| n

nc^l- *v1* (S) hits, strikes (O)
 nc3- *v2* comparative verb
 ned- *v1* (S) sleeps
 ned- *v1* (S) sleeps
 nə3ɔ *nnon*sent pathway, street,
 road

| ɸ

ɸ^lcr- *v3* (S) lowers their own (O)
 ɸp)l- *v1* (S) raises their own (O)
 ɸpən^ɔ *nnon*sent frog

| d

d3n^ɔ) *ndnon*sent(b) knee
 d)l)j)pn^ɔ *nnon*sent mist, fog
 d)l)l) *nabst* ground, floor
 d)rcz- *v1* stand, get up
 dp *pp* with (comitative)
 dp- *v3* hold, carry, instrumental
 verb
 dpede *nnon*sent city
 d)l)p- *v1* (S) sits at (O)
 d3f- *v2* (S) chases away (O), (O)
 flees from (S)

| ɥ

ɥ- *v1* (S) sees (O), because, (S) illuminates (O)

| p

p)ld *pp* with (colour) hair
 p3)ɔ *nabst* nighttime
 p3jɔ *nnon*sent cup
 pn *pp* with (instrumental)
 pu *pp* in front of
 p3D3 *nmeas* day (continuous)
 p)l) *nined* grass
 p)l- *v1* (S) climbs, rises in (O)
 p)ldɔ *nnon*sent hair
 peu- *v3* (S) spreads (O)
 peə- *v3* (S) speaks to (O), (S) asks
 (O)
 pelli *nnon*sent place
 pelliuc.c) *nnon*sent hometown,
 home village, (figurative) Rymako
 pəfɔ *nined* gold