

uruwi

なhoe.onp-pebc-delbeo (le)co A complete grammar

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	Phon	ology and orthography	5
	1.1	Phoneme inventory	5
	1.2	Hacmisation	6
	1.3	Phonotactics	7
	1.4	Vowel harmony	8
2	Synta	ax	11
	2.1	Basic word order	11
	2.2	Questions	11
	2.3	Multiple clauses	11
3	Nour	ns :	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		16
4	Verb	s	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
Δ	Dicti	onary	20

4 CONTENTS

0.1 | Introduction

1 | Phonology and orthography

1.1 | Phoneme inventory

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

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	n	ŋ	
Plosive	рb		t d	СĴ	k g	?
Fricative	fv	θð	S Z	∫3	хγ	
(coärticulated)	fx vy	θx ðγ		f∫ vʒ		
(whistled)			ŞŢ			
Affricate			ts	t∫		
Lateral fricative			łЬ			
Approximant			J	j	W	
Lateral approximant			1			
Тар			ſ			

Table 1.2: The vowels of Middle Rymakonian.

	Front	Central	Back
High Mid	i	ų	ш
Mid	ε		Λ
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	D		n	n ^ų	n ^φ	
Plosive	d b		Ω	ſ Ч ΩЧ	Ìφ	
Fricative	αu	J^{α} Z^{u}	JΖ	ls	J ^l φ ^s	
(coärticulated)	a ^h u ^h	j ^h z ^h		a ^l us		
(whistled)			J° Z°			
Affricate			ρ	l _r		
Lateral fricative			l ^l s ^l			
Approximant			h	Ч	0	
Lateral approximant						
Тар		•	Ч			

Rod signs are represented by the hacm digits $\langle 1 \ J \ \rangle \ \$ 1 $\ \$ 3 $\ \$ attached to the end of the verbs they encompass. Proper words are preceded by a backslash $\langle V \rangle$.

Note that the hacmisation is slightly different from Lek-Tsaro's use of hacm. Lek-Tsaro's $\langle h \rangle$ are now written using $\langle l \rangle$, for instance.

1.3. PHONOTACTICS 7

Table 1.4: The vowels of Middle Rymakonian.

	Front	Central	Back
High Mid	С	3	ə
Mid	е		Э
Low		1	

1.3 | Phonotactics

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

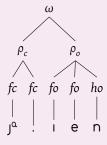
Table 1.5: Categories of phonemes.

Category	Phonemes
Full-open	ıecɔəμuz ^u zz⁰sφ ^s slyolſ
	3 h l o u u _d u _b i _l d
Neutral	JJ ^o lluhzhus 1 J
Half-closed	
Full-closed	ן ^α α ^h

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 $\langle j^{\alpha}.len \rangle \langle xj^{h}l.en \rangle$:



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:

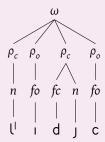
$$\begin{array}{c} X_{1}[do]X_{2}[dc]R[do] \to X_{2}X_{1}R \\ X_{1}[dc]X_{2}[do]R[dc] \to X_{2}X_{1}R \\ X_{1}[dc]X_{2}[do]X_{3}[do] \to X_{1}X_{2}X_{3} \\ X_{1}[do]X_{2}[do]X_{3}[dc] \to X_{1}X_{2}X_{3} \\ X_{1}[op \geq 0]X_{2}[do]X_{3}[do] \to X_{1}X_{2}X_{3} \\ X_{1}[op \geq 0]X_{2}[dc]X_{3}[do]X_{4}[op \leq 0] \to X_{1}X_{3}X_{2}X_{4} \quad [X_{1}.op + X_{3}.op - X_{2}.op - X_{4}.op \geq 6] \\ X_{1}[op \leq 0]X_{2}[do]X_{3}[dc]X_{4}[op \geq 0] \to X_{1}X_{3}X_{2}X_{4} \quad [X_{2}.op + X_{4}.op - X_{1}.op - X_{3}.op \geq 6] \\ X_{1}[do]X_{2}[dc]X_{3}[do] \to X_{1}X_{3}X_{2} \qquad \qquad \text{for ever} \\ X_{1}[dc]X_{2}[do]X_{3}[dc] \to X_{2}X_{1}X_{3} \qquad \qquad \qquad \text{for ever} \end{array}$$

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.

All of the rules above move from right to left and do not occur across compound boundaries. The last two rules are executed alternately 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, $\langle xj^{\alpha}i.en \rangle$ had $4 > \lceil 5/2 \rceil$ phonoruns, so the third rule was applied. This changed the word into $\langle j^{\alpha}.ien \rangle$, 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 $\langle l^i | dj c \rangle$ 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 $\langle l^l I d J - \rangle$, 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.

1.4 | Vowel harmony

Middle Rymakonian inherits vowel harmony from Lek-Tsaro. Thus $\langle c \rangle$ are front vowels, $\langle a \rangle$ are back vowels and $\langle a \rangle$ are neutral. Most roots with neither front

1.4. VOWEL HARMONY 9

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 before what they modify, but if an oblique argument is a conjunctional phrase or governs an HCA, it uses a postposition instead and precedes its antecedent.

2.2 | Questions

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:

[TODO: example]

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

[TODO: example]

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.

12 CHAPTER 2. SYNTAX

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).

14 CHAPTER 3. NOUNS

- (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 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: <×	יבוכ) "person"			
Nominative	, ,	DIZI (DIZI)		
	DIZIN (DIZIN)	DIZINI (DIZINI)		
Sentient: <×j	ɑ̃ı.en⟩ "magician"			
	J ^a ı.en (J ^a .ıen)	J ^a ı.el (J ^a .ıel)		
Accusative $\int_{0}^{\alpha} 1.ezcn$ ($\int_{0}^{\alpha} 1.ezcn$) $\int_{0}^{\alpha} 1.eycl$ ($\int_{0}^{\alpha} 1.eycl$)		J ^a ı.eµcl (J ^a ı.eµcl)		
(Note that the final consonant is preserved only in the direct nominative form.)				
Non-sentient	: <xp3n<sup>q5> "rabbit"</xp3n<sup>			
Nominative	D3N ^{\theta} D (D3N ^{\theta} D)	(G.C ^P NEC) (G.C ^P NEC)		
Accusative	D3N ⁹ DD (D3N ⁹ DD)	(Guc ^o ned) (Guconed		
Non-sentient: $\langle x.cden \rangle$ "house"				
Nominative	.cpen (.cpen)	.cde.c (.cdec.)		
Accusative	.cdezcd (.cdezcd)	.cpehcac (.cpehcac)		

3.5.2 | Measurable and uncountable classes

Table 3.2: Declensions for measurable and uncountable nouns.

	Direct			
Measure: <×	Measure: <xµ3d3> "day (continuous)"</xµ3d3>			
Nominative	h3D3 (h3D3)			
Accusative	ve µ3D3N (µ3D3N)			
Measure: <×	Measure: <xdel> "volume" (in expressions such as <xdel-43j2> "cupful")</xdel-43j2></xdel>			
Nominative	del (del)			

3.6. PRONOUNS 15

	Direct		
Accusative	pezcn (pezcn)		
Edible: <xlep< td=""><td>J.C〉"beef"</td></xlep<>	J.C〉"beef"		
Nominative	lehrc (lehcr)		
Accusative	leh.cu (lehcur)		
Edible: <xdif< td=""><td>'rice'</td></xdif<>	'rice'		
Nominative	DIN (DIN)		
	DINCN (DINCN)		
Inedible: <x< td=""><td></td></x<>			
	helo (heal)		
	helope (helpoe)		
Inedible: <×ìı	Inedible: 〈xlinly〉 "stone"		
Nominative	Jirlil (Jirlil)		
Accusative	Jirlijde (Jirlijde)		
	ົນ ^h ədɔ⟩ "empathy"		
Nominative	a^h ədə (a^h ədə)		
Accusative	α ^h əpon ^φ (α ^h apon ^φ)		
Abstract: <×	Abstract: ⟨xφcj⟩ "[the number] five"		
Nominative	φει (φει)		
Accusative	Accusative $\varphi \operatorname{czcn}^{\varphi} (\varphi \operatorname{czcn}^{\varphi})$		
Here, the fina	ll consonant is voiced if it is a fricative.		

(NB: be sure to change any $\langle 1 \rangle$ and $\langle 1 \rangle$ into $\langle 1^4 \rangle$ and $\langle 1^5 \rangle$ respectively before $\langle 2 \rangle$.)

3.6 | Pronouns

Personal pronouns are not divided into first, second and third persons as in most languages. Instead, they fall into four categories which 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 argument of the	
		sentence.	
Far	The listener.	The person with which the	
		first argument is conversing.	
Other	A third entity.	An entity that is neither the	
		speaker, the listener nor the	
		first argument.	
Generic A generic entity (akin to "o		").	
Anaphoric Subject	The subject of the previous o	lause. Also used on the verb	
	when an oblique or conjunction is present.		
Anaphoric Object	The object of the previous cla	use.	

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

16 CHAPTER 3. NOUNS

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

	Nominative		Accusative	
	Non-dual	Dual	Non-dual	Dual
Near	ſı	aczc	lin	aczen
Far	do	bþі	don	bµın
Other	nc	Jizc	ncn	lizen
Anaph. Sub.	μı	n ⁴ cµc	μın	n ⁴ cµen
Anaph. Obj.	μo	n ⁴ əµɔ	hon	ncy6 ^µ n
Generic	Generic .ə		.ə.	n

Table 3.4: Personal pronouns (before phonorun reduction).

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, <bech>) (accusative: <bech>) 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-μ3j3-α<sup>l</sup>3μθ-φcj
volume-cup-water-five
five cupfuls of water
```

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

```
Del-μ3j3-α<sup>l</sup>3μθ-φcj-ſι
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.

DIZI–ÌfƏI DIZI–ÌƏİI person-old old people

3.8 | Possession

"X's Y" is translated as $\langle Y=DI | X \rangle$ (plus phonorun reduction). The possessive construction is also used to create appositives. (Note the head-marking!)

3.8. POSSESSION 17

Observe that possession marks the head, and $\langle -DI \rangle$ is a clitic, not an affix, as in the following example:

D3D3N $^\phi$ 2- α^l 3 μ 3-D1 J^h .ien D3D3N $^\phi$ 2- α^l 3 μ 3-D1 J^h 1.en DEF~rabbit-water=GEN magician the magician's water rabbit

18 CHAPTER 3. NOUNS

4 Verbs

Verbs are conjugated for person of the subject, tense, polarity and tellicity, in two paradigms. Conjugation respects vowel harmony.

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

Table 4.1: Person-tense conjugations for first-conjugation verbs, using $\langle DII - \rangle$ "(S) eats (O)", before and after phonorun reduction.

	Nonpast	Past	
Near	DIJIU (DIJIU)	סואו (סוואן)	
Far	DIJIU (DIJIU)	DIJ3] (DIJ3J)	
Other	(ווסן) ונוס	DIJ3 (DIJ3)	
Anaph. Sub.	DIJe (JDIE)	Dilel (IDIEl)	
Anaph. Obj.	DIJC.e (DIJ.ce)	DIC.el (DI).cel)	
Generic	DIJC (JDIC)	DIJC (JDIC)	

Table 4.2: Person-tense conjugations for second-conjugation verbs, using $\langle nen-\rangle$ "(S) kills (O), (O) dies", before and after phonorun reduction.

	Nonpast	Past
Near	nənın (nənın)	nənıf (nənıf)
Far	nənın (nənın)	nən3j (nən3j)
Other	nənı (nənı)	nəng (nəng)
Anaph. Sub.	nənə (nənə)	nənel (nənəl)
Anaph. Obj.	nənə.ɔ (nənə.ɔ)	nənə.əl (nənə.əl)
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.

Some examples:

20 CHAPTER 4. VERBS

Table 4.3: Person-tense conjugations for third-conjugation verbs, using \u2214\u221eu-\u2214 "(S) spreads (O)", before and after phonorun reduction.

	Nonpast	Past		
Near	peucn (peucn)	hencl (hencl)		
Far	peuin (peuin)	hensi (hensi)		
Other	peui (peui)	hena (hena)		
Anaph. Sub.	peue (peue)	peel (peuel)		
Anaph. Obj.	peuc.e (peuc.e)	peuc.el (peuc.el)		
Generic	hen3	hen3		

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

	Positive	Negative	Interrogative
Telic	_·	_le / _lɔ	_J _l ₁
Atelic	-DC / -DƏ	- JI	-l3

```
pi)in l<sup>I</sup>ide l<sup>I</sup>ozo.
eat-NEAR.NONPAST fish flower
Fish eat flowers.
nu izipn nilia, czc<sup>1</sup> ehl<sup>1</sup> nilia
eat-NEAR.NONPAST fish flower, eat-NEAR.NONPAST cat PR.ANAPH_SUB
Fish eat flowers, and cats eat fish.
nllia l'asc, pidlia l'illa
DIII Ulide (csc) bill pillo.
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.)
enline) (aprilia
ediling line.
eat-NEAR.NONPAST-NEG flower fish
Flowers don't eat fish.
dμcn nc llμcllμcaen, jenin (i ebj.
dμcn nc llμcllμcΩen, jenin (i ebj.
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.
ducni) nc juciuncaen, jenin (i ebj.
dμcn)<sup>l</sup>ı nc )<sup>l</sup>μc)<sup>l</sup>μcΩen, jenin (i ebj.
carry-near.nonpast-interrogative prother 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.

21

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 op-
		posed to dynamic (e. g. wear as opposed to
1	(1 - 11	put on).
Interrupted	(lcl1	An action that was interrupted.
Perfect	_ J	An action that has already finished.
		Changes present tense to immediate past. Also used to distinguish dynamic actions
		as opposed to static (e. g. put on as opposed
		to wear).
Gnomic	_}	A general truth or aphorism, or an action
Circinic		done habitually.
Gnomic dubitative	(lcl?	A general truth or aphorism that the
		speaker considers to be false.
Deontic necessity	– 0	An action that the speaker insists on hap-
		pening.
Epistemic necessity	Jadu	An action that the speaker infers is happen-
		ing.
Deontic potential	4-	An action that the speaker permits to occur.
Epistemic potential	4deſ	An action that the speaker infers that might
1		happen.
Unexpected	_ \	An action that is unexpected (akin to using
Commonative	des	"but").
Comparative	dei	Indicates an action of greater intensity than what was described in the previous
		clause.
Nonexclusive subject	l ⁴ c1	Indicates that the subject comprises not
11011exelusive subject	1 01	only of what is explicitly mentioned, but
		also other things.
Nonexclusive object	сЧү	Indicates that the object comprises not
		only of what is explicitly mentioned, but
		also other things.
Nonexclusive argument	clall	Combination of both nonexclusive subject
		and nonexclusive object.

An attached rod signal reverts $\langle J^{\alpha} \ z^{u} \rangle$ to $\langle J^{h} \ z^{h} \rangle,$ respectively, and might affect phonorun reduction.

22 CHAPTER 4. VERBS

An example:

```
I'IIIIIDC1 (I nc, lcnc.els d3nºIuə-µI.
I'IIIIIDC1 (I nc, lcnc.els d3nºIuə-µI.
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 $\langle n \rangle$ in, on, at (location) (from Lek-Tsaro $\langle n \rangle$ (S) is at (0)). The sentence *Ryze* is hiding from me in the tree would be translated as:

```
In South nepael (in \u00abusze) 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 $\langle d\mu \rangle$ (from Lek-Tsaro $\langle d\mu cn \rangle$ hold, carry, which also begets $\langle \mu n \rangle$), but now we have nested obliques, which means we need to use $\langle n \rangle$ as a postposition:

```
fouci pn for in head in hose 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 $\langle -f \rangle$, and those that end with an open phonorun receive $\langle -z \rangle$.

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 infixed:

```
/h3ze au /liz3| jpie lehc"
/h3ze au /liz3| pije lehc"
```

4.3. CONNECTORS 23

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:

```
\u00e4sze an \fiz3l fepc. an \fidjc \u00fcnie.
\u00e4sze an \fiz3l fep.c an \fidjc \u00fcnie.
Ryze and Tazyl beef and soup eat-ANAPH_SUB.NONPAST
```

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

```
nyızı an-lifəi pan<sup>9</sup>0
nyızı an-ləfi pan<sup>9</sup>0
cat and-old rabbit
old cats and rabbits
```

4.3 | Connectors

(This section will refer to section 2.11 of \upber D $\Omega \Omega / (\Omega' \n^{\phi} \ln \text{extensively.})$

Middle Rymakonian uses connectors to express relationships between sentences like Jbl. In Middle Rymakonian, connectors do not occupy an indexed position in the sentence; 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 ⟨¬ſ⟩ 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 sentences α and β , respectively (NB: it is possible that $\alpha = \beta$)
- there are no sentences between α and β that has a connector with the same type and seqid but a different parity from x or y

24 CHAPTER 4. VERBS

Table 4.6: Connector types.

Name	Arity	Middle Rymakonian	Explanation		
Ordinary	n	IJ–	Covers both the sequential and		
			parallel connectors of Jbl.		
Analogous	2	ıd–	"For the same reason α is true, β is		
			also true." Also used as an "and"		
			without stating any order.		
Subversive	2	ΙΩ-	" α but β ."		
Augmentative	n	οφ ^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. Sentences of a connector set are joined by the relation of the connector used therein:

```
Dilif l'ide f'DZD IJEI.

eat-NEAR.PAST fish flower ORDINARY-(e)-0

The fish ate the flower.

IJEI NCDC[ fdezc fDuD].

ORDINARY-(e)-0 dance-NEAR.PAST child tree

Then the child danced around the tree.

IJEI DIEL L'IL'IdeD.

IJEI DIEL L'IL'IdeD.

eat-ANAPH_SUB.PAST ORDINARY-(e)-0 DEF~fish-ACC

Then the child ate the fish.

Delcif puenp IJEZ dD.

Dellcif puenp IJEZ dD.

imitate-NEAR.PAST-IMP frog ORDINARY-(e)-1 PR.FAR
```

4.4 | Comparatives

DII) (Inde (Dzz) Ijei.

The comparative is a function cmp : $A \times A \times (A \to \mathbb{R}) \times (A \times A \to \{0,1\}) \to \{0,1\}$, where cmp $(a,b,f,\Box) = f(a) \supset f(b)$. Consider the following sentences:

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

Semantically, they can be translated to:

At another time, a frog was imitating me. (...)

4.4. COMPARATIVES 25

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

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

The heart of comparatives in Middle Rymakonian is the quadrivalent verb $\langle \Omega \rangle$ a b f \rangle . Thus:

```
Dilcl^lı (lozod-J^{\alpha}cn, \Omegaozın l^lınde nyızı \muo nef. eat-generic-Q flower-Acc-how_many, CMP-NEAR fish cat PR.ANAPH_OBJ > Fish eat more flowers than cats.
```

```
Dilcl^lI .ə-J^{\alpha}cn (lozo, \Omegaozin ^lInde nyizi \muI nef. 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 4.7: Comparators in Middle Rymakonian.

	Comparator
>	neſ
<	ര ാി
=	ſen ^φ
\geq	MI
> <	DCJ
\neq	.3J
\approx	μej
>>	α ^h e
«	ΩΙΝ

26 CHAPTER 4. VERBS

Romanisation

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

Table 8: The consonants of Middle Rymakonian.

	Bilabial	Dental	Alveolar	Palatal	Velar	Glottal
Nasal	m		n	ñ	ŋ	
Plosive	рb		t d	ťď	k g	
Fricative	fv	þð	S Z	šž	hħ	
(coärticulated)	fh vħ	þh ðħ		fš vž		
(whistled)			ŝ ĉ			
Affricate			ts	tš		
Lateral fricative			ŚŻ			
Approximant			r	j	W	
Lateral approximant			1			
Тар			ř			

Table 9: The vowels of Middle Rymakonian.

	Front	Central	Back
High Mid	i	у	u
Mid	e		0
Low		a	

The digraphs <fh vh þh ðh fš vž ts tš> correspond to coärticulated 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 $\langle 1\,2\,3\,4\,5\,6\,7\,8 \rangle$ attached to the end of the verbs they encompass. Proper words are preceded by a backslash $\langle \backslash \rangle$.

 $\langle \eta \rangle$ should be capitalised as $\langle N \rangle$ only if one can depend on the majuscule glyph appearing like an N with a hook. Otherwise, it should be spelled $\langle Ng \rangle$.

28 CHAPTER 4. VERBS

A Dictionary

An entry looks like this: Dil- 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
- 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.

Indezc nsent child (young person)

Sua) nnonsent tree

Substituting the position of the positi

```
الر
                                             n
                                                Nyızı nnonsent cat
   ^{l}IN- v1 (S) fights (O)
                                                NCD-v3 (S) dances around (O)
   (1) DZD nnonsent flower
                                                ne\mua-v3 (S) hides from (O)
                                                nən- v2 (S) kills (O), (O) dies
  þ
                                               \mathfrak{a}
   Poze nnonsent fruit
                                                acjn pp
                                                           according to
| ]
                                               a^{l}
   In pp in, on, at (location)
   Indij nined stone
                                                alapa nedib potable water
   ləsi desc old
                                               a^h
ارا
   l<sup>l</sup>μcΩen nnonsent book
                                                a<sup>h</sup>ədd nabst empathy
Ιl
                                               D
                                                D3\Pi^{\phi}3 nnonsent rabbit
   lcn-v1 (S) shoots an arrow to (O)
                                                DII - v1 (S) eats (O)
                                                DIN nedib rice
  IJ
                                                DIZI nsent person
                                                DOI - v2 (S) produces, makes (O)
   l'Idjc nedib soup
                                                Del nmeas volume
   Unde nnonsent fish
                                                Dell-v3 (S) imitates (O)
J
                                               Ω
   jeste nnonsent land, country
                                                \Omega \Sigma - v1 comparative verb
   jen-v1 (S) is worried by (O)
                                               φ
l Ja
                                                \varphi \mu \ni n^{\varphi} nnonsent frog
   J<sup>a</sup>ı.en nsent magician
   J^{\alpha}IZ - v3 (S) creates, makes (O)
                                               d
   J^{\alpha}cn nabst how many?
                                                d3n^{\varphi} i ndnonsent(b) knee
l lh
                                                d\nu pp with (comitative)
                                                dp-v3 hold, carry, instrumental
   J<sup>h</sup>z pp written by
                                            verb
```

l h

µ3j3 nnonsent cup µn pp with (instrumental) μ3D3 nmeas day (continuous)
μιίι nined grass
μeu- v3 (S) spreads (O)
μθίο nined gold