Masnēlíkas

grammar of a constructed language

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Contents

Introduction

1 Goals

This language was originally inspired by Ancient Greek. Most of my glossopoetic efforts have been concentrated on isolating or agglunative languages, so I wanted to create something fusional. Latin is of course the classic choice, but I prefer (at least for right now) the Greek aesthetic. Around the same time, I was falling in love with /ɬ/, and wanted to include it in the Greek-inspired inventory. That's when it hit me that I should mix Classical Nahuatl aesthetics with the Greek aesthetics I already had—and the language was born.

See Ancient Greek's phonology or grammar.

See Classical Nahuatl's grammar or phonology. Most of my knowledge of Classical Nahuatl comes from Andrews 2003.

Masnēlíkas is designed to be *a priori*, fusional, pre-categorial, … and a long-term project, so this document may be updated in the future!

2 Challenge

Around the time I started the idea of this language, Speedlang Challenge 7 was posted, and I decided to participate. The challenge requirements are listed below.

- **Pitch accent**. Each lexical item in **Masnēlíkas** has an unpredictable tone contour. See §1.2 on page 2.
- **Irregular vowel inventory**. While most vowels have a long-short pair, there are two vowels that have only a long pair. See §1.1.2 on page 1.
- **Differential object marking**. Animate nouns can't be put into the ACC case. See §3.1.1 on page 10.
- **At least two types of converb**. There is a converb form for both perfective and imperfective stems. See §3.2.3 on page 12.
- **Common apophony**. The imperfective stem of a predicate is usually formed via ablaut. See §3.2.2 on page 11.

In order to complete the challenge, these requirements were prioritized over some more "functional" elements of the language. Those will likely be added later.

1 Phonology

Masnēlíkas has a medium-sized phonemic inventory with some rare segments, but its most distinctive phonological feature is its pitch accent system.

1.1 Inventory

Masnēlíkas has a fairly average number of segments. It contains some typologically rare sounds as well as an odd division of vowel space.

1.1.1 Consonants

Masnēlíkas has 16 phonemic consonants. There are three four distinguished places of articulation: labial, dental coronal, lateral coronal, and velar.

		Labial	Dental	Lateral	Velar
	Fortis	f ⟨**ph**⟩	s	ɬ ⟨**lh**⟩	x ⟨**kh**⟩
Obstruent	**Tenuis**	p	t	tɬ ⟨**tl**⟩	k
	Lax	b	d		g
Approximant			ɹ ⟨**r**⟩	l	h
Nasal		m	n		

Table 1.1: Consonant inventory

1.1.2 Vowels

Masnēlíkas has 10 phonemic vowels.

	Front	Mid	Back
High	i iː ⟨**i ī**⟩		
Mid	e eː ⟨**e ē**⟩		o oː ⟨**o ō**⟩
Mid-Low	ɛː ⟨**ȳ**⟩		ɔː ⟨**ū**⟩
Low		a aː ⟨**a ā**⟩	

Table 1.2: Vowel inventory

Diphthongization of /i/ Most vowel clusters undergo medial hiatus, but clusters with /i/ and a long vowel do not; /i/ becomes [j] in those environments.

The phone [j] patterns as an approximant, not a vowel, in stress placement. It is not syllabic but can bear tone in the coda.

Vowel clusters Two short vowels with the same quality are realized as a long vowel when clustered. For instance, /o.o/ is realized as [oː]. Long vowels are not analyzed as vowel clusters because of morphological processes—for example, long vowels can undergo ablaut, whereas in vowel clusters, only one vowel undergoes ablauting.

Phonetic value of /o/ The mid-high vowel /o/ is often realized somewhere between a prototypical [u] and [o], best transcribed as [o̝]. Other vowels occupy more common positions in the vowel space.

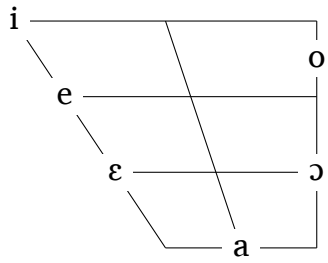

Figure 1.1: Canonical phonetic realizations of vowels

1.2 Pitch Accent

Although pitch accent is a nebulous concept in broad typology, in **Masnēlíkas** it refers to an overlap of a fixed-stress system and a phonemic tone system. Stress is predictable based on mora weight, but the tone melody assigned to the stressed syllable is not. As a result, lexical items have an unpredictable, phonemic tone contour herein analyzed as a pitch accent system.

In dictionaries, the tone contour of a root is demonstrated via its principle parts.

1.2.1 Morae

The mora is the tone bearing unit in **Masnēlíkas**. A mora can have only one tone melody, either high or low.

As is cross-linguistically typical, onset consonants or clusters are zero morae, a short vowel segment is one mora, and a long vowel segment is two mora. Coda consonants with positive VOT (voiced obstruents, approximants, and nasals) are one morae, but coda consonants with even or negative VOT (tenuis or fricative obstruents) are zero mora.

Coda obstruents /b d g/ often become the more sonorant [β̞ ð̞ ɣ̞] to facilitate tone-bearing.

A light syllable has just one mora, an open, short vowel. A heavy syllable has two mora, either an open long vowel or a closed short vowel. Some syllables may be classified as superheavy, having a closed long vowel.

1.2.2 Stress

Stress falls on the heaviest between the antepenultimate and penultimate syllable. If both are equally heavy, then the penultimate is preferred. There is one exception for derived words: when all other syllables are light, a superheavy initial or final syllable will be stressed.

Rarely, too, long stems. For example, **àrkemas** "wild boar" frequently has initial stress in its conjugations.

1.2.3 Pitch

There are two marked pitches, rising and falling. These pitch melodies attach to the stressed syllable in a lexical item. As a result, a stressed syllable may have either a [HL] or [LH] melody.

A *lexical item* refers to a predicate (see §2.1) or other word class.

Non-stressed syllables do not have an assigned pitch melody and their tonal realization will default to low pitch unless influenced by contour or sandhi. Frequently, the pitch realization of unstressed syllables is determined by the dissimilation of a [HL] or [LH] melody from a light stressed syllable only capable of realizing one of the tones.

Antepenultimate and penultimate syllables can have either rising or falling pitch, but syllables on the edges of word boundaries are more limited. Initial syllables can have only falling pitch, and final syllables can only have rising pitch.

Monomoraic words have an assigned melody for their single morae, but the melody doesn't surface unless affixation provides the word additional morae.

1.2.4 Contour

The tone contour of a word depends on its phonemic pitch accent. A stressed syllable with only one mora can only bear half of a rising or falling melody, and thus will shift its build up to a prior syllable.

1.2.5 Sandhi

Tones typically spread from the right edge of a prosodic unit to the left edge.

1.3 Phonotactics

1.3.1 Syllable Shape

Maximal syllable shape is CVC.

1.3.2 Initial Clusters

Masnēlíkas allows some heteroörganic clusters as word-initial onsets. The second part of a word-initial cluster must be dental.

The tenuis clusters /pt kt/ and the sibilant clusters /ps ks/ are more common than other clusters.

1.3.3 Final Consonants

Masnēlíkas only allows the consonants /s ɹ n/ word-finally. In addition, there are word-final clusters /ps/ and /ks/.

Word Classes 2

Masnēlíkas is *precategorial*, meaning that there is not a semantic nor morphological distinction between nominal roots and verbal roots. Any given lexeme can function as a predicate or predicate argument; in fact, both uses take the same general morphological patterns. The vast majority of words, besides some particles, pronominals, and adpositions, fall into this category. These free morphemes are herein termed predicates, and their role as noun or verb is only determined syntactically.

Because of this syntactic difference, the term *omnipredicative* is avoided.

2.1 Predicate

A predicate is a free morpheme that can be used as either noun or verb. A predicate can function as a clause itself, as in (1a), or as an argument of a clause, as in (1b).

(1) a. **Psikáe.**
psík-ae
soldier-NOM.PL
“They are soldiers.”

b. **Mḗs astèktlon psikáe.**

mḗs =	*astèka-tl-on*	*psík-ae*
3C→SAP =	defend-E-3C.PL.PRS	soldier-NOM.PL

“The soldiers defend us.”

More literally, “They defend us; they are soldiers.”

Predicates are an open class, and readily accept new coinages. Most predicates are derived, although some can be borrowed. Each predicate stem has a number of different inherent properties, such as class or telicity, which determine its breadth of uses. Each stem also has a number of phonological properties—theme, strength, melody—which affect its conjugation patterns.

2.1.1 Class

Predicates can be subdivided into three classes: *animate*, *inanimate*, and *collective* nouns. Animate stems include humans, weather events, instruments, and predator animals. Inanimate stems include natural or manmade objects and pet animals. Collective stems include herd animals and natural resources. Collective stems are typically understood as mass nouns, and do not decline for plurality.

The three classes fall into two genders: a *common* gender for both animate and inanimate predicates, and a *neuter* gender for collective predicates. The two genders have different agreement and conjugation patterns. Although their agreement doesn't differ, animate and inanimate nouns are separated by their case-marking patterns; animate nouns don't decline into the accusative case.

	CMN	ACC
Animate	✓	-
Inanimate	✓	✓
Collective	-	✓

Table 2.1: Noun class summary

2.1.2 Telicity

While noun class and gender typically only matters when predicates serve as the argument of other predicates, predicates also have different patterns when acting as verbs. Predicates have both perfective and imperfective stems. While most predicates have both forms, some only have one or the other. Predicates with only perfective stems are termed *atelic*, while predicates with only imperfective stems are termed *telic*.

Ambitelic stems typically still show a change in morphophonemic forms between the two aspects. Usually this involves a process of ablaut, but may also involve stem elision for weak stems.

2.1.3 Theme

Thematic stems have a final vowel that corresponds to their gender, whereas athematic stems either end in a final consonant or, more rarely, a vowel that does not correspond to gender. Thematic common stems end in /a/ or /o/, whereas thematic neuter stems end in /i/.

2.1.4 Strength

Strong stems can serve as the main verb of a clause without the support of the morpheme **-tl-**. Weak stems require the morpheme and may additionally undergo stem elision in the imperfective. All stems ending in the thematic vowel /a/ are weak, and some stems ending in a sonorant, such as /ɹ/ or /m/, are weak as well.

2.1.5 Melody

Stems can have either rising melody or falling melody, which is lexically determined. Melody does not affect morphophonological processes.

See §1.2 on page 2 for more on pitch accent.

2.2 Pronominals

Pronominals are bound morphemes that indicate polypersonal agreement on predicates. They cannot be inflected without the support of a predicate, such as the stem **ié** "be." Pronominals are a closed class.

Table 2.2: Pronominal clitics

	→ ∅	→ 1/2	→ 3.CMN	→ 3.NTR
1/2	tòi	tés	ègo	én
3.CMN	í	mḗs		
3.NTR	spes	es		sén

Due to historical sound change, the 1st and 2nd person pronouns have merged into a single pronoun for speech act participants. In situations where this might cause ambiguity, the vocative particle **ō** is used to clarify a 2nd person referent, as in (2).

A *speech act participant* is either the utterer or the audience.

(2) **Ō tòi coyőn.**
ō *tòi=cóyo-on*
VOC SAP=wolf-ACC
"Oh you, who becomes a wolf."

If further clarification is required, then names or titles are frequently used, especially in literary works.

2.3 Particles

Particles are free morphemes that convey discourse information. They cannot be inflected. They typically appear at the beginning of an utterance. Particles are a closed class. They don't have an assigned pitch melody.

2.4 Adpositions

Adpositions are free morphemes that convey relationships between nominal predicates. Although they morphologically act like predicates, they cannot fulfill the same syntactic duties, and may also have defective forms. This is a closed class and does not readily accept new members.

As in (3a) and (3b), adpositions can serve either as predicates or predicate arguments.

(3) a. **Mḗs psikkā́i nàlhas.**
mḗs=psík-kāi *nàlh-as*
3C→SAP=soldier-3C.SG.PST beside-NOM.SG
"Those around me are soldiers."

b. **Í nàlkhāi psíkos.**
í=nàlh-kāi *psík-os*
3=beside-3C.SG.PST soldier-DAT.SG
"They stood beside the soldiers."

DAT is used to mark animate patients; see §3.1.1.

Notably, however, they do not pass the constituency test to be consider predicates: they cannot form a clause on their own. This is true for both stative predicates, as in (4a), or active predicates, as in (4b).

(4) a. *__Nàlhas.__
nàlh-as
beside-NOM.SG
Intended: "They are around."

b. *__Nàlkhāi.__
nàlh-kāi
beside-3C.SG.PST
Intended: "They stood beside."

Morphology 3

Only predicates exhibit morphological changes. Three morphological groupings are distinguished: *nominal*, *verbal*, and *derivational*. The labels "nominal" and "verbal" are used out of convention, but the two categories are not discrete as in many other languages. Both nominal and verbal conjugations can be used as sole predicates or predicate arguments. The main difference between these two groupings is their distribution: the nominal conjugations are common for predicate arguments, while the verbal conjugations are not.

3.1 Nominal

3.1.1 Case

The four case conjugations are *nominative*, *accusative*, *genitive*, and *dative*.

	NOM	ACC	GEN	DAT
Absolute	-as	-on	-ar	-os
Construct	-iās	-iān	-iār	-iōs
Plural	-ae	-ēn	-ēs	-os

Table 3.1: Common case summary

While common gender predicates have endings for each of the four cases, the neuter gender combines NOM and ACC into a direct case, and GEN and DAT into an oblique case. Both cases also share a common conjugation for construct state and there is no plural conjugation.

	NOM/ACC	GEN/DAT
Absolute	-in	-nis
Construct	-n	-n

Table 3.2: Neuter case summary

Nominative

The nominative case is used for subject or agent arguments of predicates.

As a predicate itself, the nominative has a meaning of "be."

Accusative

The accusative case is used for patient arguments of predicates.

As a predicate itself, the accusative has a meaning of "become" or "change into."

Dative

The dative case is used for non-core arguments of predicates. It is also used for location.

As a predicate itself, the dative has a meaning of ...

Differential Object Marking Although both share the common gender, the main difference between animate nouns and inanimate nouns is that animate nouns exhibit differential object marking. While all other objects are marked with the accusative case, animate objects are marked via the dative case. As shown by (5a), the accusative case is ungrammatical for an animate referent, while the dative case is not, as in (5b).

These types of constructions in Basque are analyzed as DOM by Odria 2012.

(5) a. *Ègo namíktlo psikián.
ègo= *namíka-tl-o* *psík-iān*
SAP→3C= love-E-SAP.SG.PRS soldier-ACC.CON
Intended: "I love the soldier."

b. Ègo namíktlo psíkiōs.
ègo= *namíka-tl-o* *psík-iōs*
SAP→3C= love-E-SAP.SG.PRS soldier-DAT.CON
"I love the soldier."

Genitive

The genitive case is used for marking a possessor. It can also be used to mark instrument or manner.

As a predicate itself, the genitive has a meaning of ...

3.1.2 State

Absolute is the default state. *Construct* state is used for possessed or strongly definite referents. Plural state typically marks number greater than one—both zero and negatives usually have singular marking. Plural state can be used for possessed, unpossessed, definite or indefinite referents.

Strong definiteness is anaphoric reference (ie. "the one I mentioned"), but does not encode uniqueness (ie. "the moon").

3.2 Verbal

Verbal conjugations are split into *perfective* and *imperfective* endings.

3.2.1 Perfective

The perfective stem is the default, dictionary form of a predicate. Perfective predicates convey an action as whole or having a definitive endpoint. The perfective also has a stative meaning.

		PRS	PST	FUT	PSV	SBJ	ADM
SAP	SG	-o	-ka				
	PL	-onis	-kenis				
3 CMN	SG	-ō	-kāi				
	PL	-on	-an				
3 NTR		-oi	ki				

Table 3.3: Perfective conjugation summary

3.2.2 Imperfective

The imperfective stem has less tense-aspect-mood conjugations and is consider the more-marked form. Imperfective predicates convey an action as ongoing or process-like, without a finite point in time.

		PST	NPST
SAP	SG		
	PL		
3 CMN	SG		
	PL		
3 NTR			

Table 3.4: Perfective conjugation summary

For most predicates, the imperfective stem is formed via ablaut of the final vowel of the stem. In ablauting, low

Stem ablaut comes from the historical imperfective marker ***-i-***.

or mid-low are raised: /a aː ɛː/ become /e eː eː/, /e eː/ become /i iː/, and /ɔː/ becomes /oː/. The high vowels /i o/ instead undergo lengthening, becoming /iː oː/. The long high vowels /iː oː/ do not alternate via ablaut.

Some weak stems also undergo stem elision in the imperfective. Although elision can be irregular, it is common for stem-final liquids, /ɹ l h/, to be elided in imperfective stems.

3.2.3 Converbs

There are two converbial forms, one for the perfective form, and another for the imperfective form.

Imperfective Converbs

The imperfective converb is used for simultaneous action.

Perfective Converbs

The perfective converb is used for sequential action. Perfective converbial predicates are typically interpreted as chains of events leading to the main predicate.

Numbers A

Masnēlíkas uses a bijective system of counting in base 8. It has digits for 1 through 8, and multiples of eight are writtenly different than in a non-bijective system. For example, sixteen is written as "18" instead of "20."

Since it has no digit, the number 0 is usually expressed as **midḗnas** "none."

Table A.1: Common numerals

	Conjunctive	Ordinal
0	midḗnas	
1	ía̍s	prūtóas
2	kòpas	gia̍́tas
3	rátās	kēratās
4	kèdās	kēkèdās
5	bā́s	kḗbās
6	máiās	kēmáiās
7	sìsphās	kēsìsphās
8	dìas	hanèas
16	sidìas	kēsidìas
32	mḗlas	kēmḗlas
64	atlètas	kēatlètas

Disjunctive numbers Ordinal numbers are used for disjunctive modifiers whereas conjunctive numbers are used for disjunctive counting. Thus **sábas prūtóas** is "hunter one (of a group)" or "first hunter," while **sábas ía̍s** is "one hunter." On the other hand, counting is accomplished by listing the conjunctive forms, typically in absolute nominate singular. For example, **ía̍s, kòpas, rátās…** is "one, two, three…"

Note that predicates with ordinal modifiers are in the singular.

Multiple digits Multi-digit numbers are spoken and written from lowest to highest place. For instance, fourteen is **máiās dìas** "six and eight" and twenty-two is **máiās sidìas** "six and sixteen." Ordinal numbers formed this way only have the greatest digit as ordinal; for example, twenty-second is **máiās kēsidìas** "six and sixteenth." Often, the case ending of the first predicate will be elided and it will be incorporated into the second predicate, yielding forms like **maía̍dìas** "fourteen."