Letanis Reference Grammar

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Contents

1 Introduction

Letanis is an *a priori* constructed language created by Thomas Heller in 2020.

More information about Letanis can be found on the Letanis website:

https://tmh.conlang.org/letanis/

1.1 Typology

Letanis exhibits an *isolating morphology* and *SOV syntax*.

1.2 Goals

The goal of Letanis was to explore several features that could be beneficial for an IAL[1]:

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[1]international auxiliary language, or auxlang for short

- a *simple* phonetic inventory and syllable structure

- a *self-segregating* morphology

- a *minimalist*, experimental syntax

- a *topological* lexicon structure

With a simple phonetic inventory and syllable structure, Letanis should be easy to pronounce for most people on Earth. It is also relatively easy to write down, because only fifteen distinct symbols are required.[2]

The self-segregating morphology helps listeners of spoken Letanis to recognize word boundaries, even if they have not yet memorized the whole lexicon.

The rules of syntax are greatly reduced, so that the syntactic structure of a text can be understood with little effort.

Furthermore, the topological lexicon allows learners to focus on memorizing short words first, and longer words later, and they will still be able to understand the gist of a conversation, even if they don't fully comprehend all of its long words yet.

A secondary goal of Letanis was to allow for experimentation with computer speech recognition. Letanis' verb-final syntax is intended to give real-time speech parsers an additional clue as to whether they should wait for further input or a sentence is complete.[3] It is debatable if this feature is really all that helpful for Letanis, as statements are often followed by a conjunction and another statement.

2 Phonology

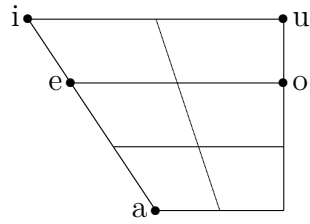Letanis has fifteen distinct phonemes that can be represented using the Latin alphabet:

a b d e g i k l m n o p s t u

2.1 Vowels

Letanis has five vowels:

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[2]plus spacing and/or punctuation
[3]This could be considered a "self-segregating syntax".

Front vowels are unrounded, back vowels are rounded.

2.2 Consonants

Letanis has ten consonants:

	Bilabial	Alveolar	Velar
Plosive	p · b	t · d	k · g
Nasal	m	n	
Fricative		s	
Lateral approx.		l	

Plosives to the left of each column and "s" are unvoiced, other consonants are voiced.

2.3 Syllable structure

The syllable structure of Letanis is "CV(C)".

Onset consonants are: "b", "d", "g", "k", "l", "n", "p", and "t"

Optional coda consonants are: "m" and "s"

This results in the following 40 permissible syllables, plus 80 more syllables with "-m" or "-s" coda ("bam" through "tus"):

	-a	-e	-i	-o	-u
b-	ba	be	bi	bo	bu
d-	da	de	di	do	du
g-	ga	ge	gi	go	gu
k-	ka	ke	ki	ko	ku
l-	la	le	li	lo	lu
n-	na	ne	ni	no	nu
p-	pa	pe	pi	po	pu
t-	ta	te	ti	to	tu

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2.4 Stress

Stress falls on the *first* syllable of a word.

3 Morphology

3.1 Word classes

Letanis has four primary word classes:

- nouns
- verbs
- numerals (digits and quantifiers)
- conjunctions

Nouns end with the consonant "-s".

Other words end with the consonant "-m".

3.2 Word boundaries

Syllables with codas appear only at the end of words, which means that the consonants "m" and "s" never occur in the middle a word:

Word: [CV] ... [CV] [m|s]

Therefore, a stream of phonemes or letters can always be split up into single words unambiguously by looking for these two consonants, which makes Letanis' morphology *self-segregating.*

3.3 Numbers

The ten **digits** are syllables that can be used to build absolute numbers. The last syllable must be terminated with "-m", as shown in the following examples:

Letanis	Translation	Description	Number
das	person	exactly one	-
bim das	three people	exactly three	3
bobem das	forty-two people	exactly forty-two	42
badududum das	one-thousand people	exactly one-thousand	1000

For more advanced numbers, see the next section about Advanced numbers.

3.4 Advanced numbers

More advanced numbers, beyond positive integers, can be expressed using Letanis' *advanced number mode.*

The following syllables can be used within numeral expressions:

Syllable	Description	Example	Translation
po	Decimal separator	**bupodadem**	5.67
na	Fraction sign	**banabim**	1/3
pe	Base switch	**bepebabaduba**	base 2: 1101

When using **"pe"** so witch to base 16 (hexadecimal), the syllables **"ga"**, **"ge"**, **"gi"**, **"go"**, **"gu"**, and **"ka"** can be used to represent the letters "A", "B", "C", "D", "E", and "F", denoting the decimal numbers 10 through 15, respectively.

When using advanced number mode, an initial digit is always required to mark the beginning of the numeral. This is achieved by prepending **"du"** ("zero") to the word, for example:

Syllable	Description	Example	Translation
po	Decimal separator	**dupobebum**	.25 (lit. "0.25")
mi	Negative sign	**dumidibodom**	-849 (lit. "0-849")

3.5 Variables

A special category of nouns are the variable pronouns **"tas"**, **"tes"**, **"tis"**, **"tos"**, and **"tus"**.[4] Variable pronouns are similar to personal pronouns, but they can be explicitly assigned using the corresponding variable assignment verbs **"tam"**, **"tem"**, **"tim"**, **"tom"**, and **"tum"**.

Because Letanis has no relative pronouns or cumulative conjunctions, the five variable pronouns are a useful to refer back to previous phrases.

When multiple speakers hold a conversation, variable pronouns are *shared* between speakers. If one speaker assigns a variable pronoun, it is implied that other speakers use it with the same reference in mind, until they reassign it.

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[4]Lojban speakers will recognize this as the "ko'a"/"fo'a" series

(1) Bebikokos tam. Des tas pidem. Des tas nenam.
     snowflake a:a   SG.1 v:a see   SG.1 v:a be.happy.about
     'The snowflake. I see it. It makes me happy.'

     'The snowflake, that I see, makes me happy.'

If an assignment verb is used with multiple arguments, it assigns the group of all arguments to a single variable pronoun, for example:

(2) Babis gim babubes tam. Tas batus kam.
     moon PL star   a:a v:a sky   be.at
     'The moon, the stars. They are in the sky.'

     'The moon and the stars are in the sky.'

Aside from its short-lived use as a replacement for relative pronouns and enumerations, the variable pronouns serve as a marker for nouns that will be a topic relevant to the discussion for at least the next few sentences.

Note that, in theory, an infinite number of variable pronouns is available by adding further syllables, for example **"tatas"** or **"tebas"**. In practice, however, as few variable pronouns as possible should be used, so that speakers don't lose track of their referents.

4 Syntax

Letanis syntax can be described in six rules.

4.1 Basic statements (I)

The basic word order of Letanis is subject–object–verb (SOV).

A sentence consists of at least one verb, optionally preceded by one or more noun phrase arguments:

     Statement: [Argument] [Argument] ... [Verb]

(3) Des pules pilem.
     SG.1 music hear
     'I hear the music.'

If an argument is intentionally left out, the word **"lis"** is inserted in its place to skip on to the next argument.[5]

(4) Lis bebis nekem.
     -   rain be.surprised.by
     'The rain is surprising.'

4.2 Quantification (II)

A noun phrase is simply a noun.

Optionally, it can be preceded by a numeral:

Noun phrase: [Numeral] [Noun]

A numeral can be one of two types:

The four **quantifiers** can be used directly before the noun:

Letanis	Translation	Description	Symbol
las	house	singular, exactly one	1
gim las	houses	plural, more than one	>1
gom las	some house	existential, at least one	$\exists$
gum las	all houses	universal, for all	$\forall$
gem las	[?] houses	unknown quantity	?

The existential quantifier should be used with care, as it refers to all matching objects in the known universe.

The ten digit syllables that can be used to build **absolute numbers**, as described in the section about Numbers and Advanced numbers, can also appear directly before nouns.

4.3 Temporal quantification (III)

The temporal verbs **"no-"** and **"nu-"** refer to points in time and time frames, respectively.

Statements with temporal verbs *don't* take regular noun phrases as arguments. Instead, they appear either without arguments (avalently) or with only absolute numbers as arguments.

The verb **"nom"** by itself means "now", i.e. it refers to the present moment in time:

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[5]Lojban speakers will recognize this as "zo'e"

(5) Nom.
     now
     'Now.'

Between one and six arguments, namely "second", "minute", "hour", "day", "month", and "year", can be added as arguments to refer to other points in time, for example:

(6) Dum babum babom   nom.
     zero fifteen fourteen at
     'At 15:14:00 [on the current day, in the current month, in the current year].'

(7) Dum dum dum bom dem   nom.
     zero zero zero four seven at
     'At midnight, on July 4 [in the current year].'

(A 24 hour clock system is implied.)

When arguments are used, the first arguments always refers to the "second", the second argument to the "minute" and so on.

Further arguments can be omitted. If they are omitted, the *current* unit of time, i.e. the current minute, current hour, current day etc., is implied.

The verb **"num"** by itself refers to the *current day* as a time frame:

(8) Num.
     today
     'Today.'

Optionally, the number of a day, a month, and a year can be added as arguments:

(9) Babim   num.
     thirteen day
     'On the thirteenth day [of the current month in the current year].'

If the month and year arguments are not given, the current month and current year are implied. If only the month but not the year argument is given, the specified month of the current year is implied.

There are five more words beginning with **"nu-"**, namely **"nudum"**, **"nugum"**, **"nulum"**, **"nunum"**, and **"nupum"**, which refer to the current year, the current month, the current minute, the current hour, and the current second, respectively:

(10)   Nudum.
        this.year
        'This year.'

(11)   Nulum.
        this.month
        'This month.'

(12)   Nunum.
        this.hour
        'This hour.'

(13)   Nupum.
        this.minute
        'This minute.'

(14)   Nugum.
        this.second
        'This second.'

For **"nudum"**, the number of a year can be added as an argument:

(15)   Badededam   nudum.
        one.thousand.seven.hundred.seventy-six year
        'In the year 1776.'

For **"nulum"**, the number of a month and optionally a year can be added as arguments:

(16) Bem nulum.
      two   month
      'In February [of the current year].'

If no year is given, the month of the current year is implied.

For **"nunum"**, the number of an hour, and optionally a day, a month, and a year can be added as arguments:

(17) Dum bom dem   bedudubim   nunum.
      zero four seven two.thousand.three hour
      'From 00:00:00 to 00:01:00 on July 4, 2003.'

If no day, month, or year is given, the current day, month, or year is implied.

For **"nupum"**, the number of a minute, and optionally an hour, a day, a month, and a year can be added as arguments:

(18) Bidum nupum.
      thirty minute
      'From minute thirty until minute thirty-one [of the current hour, on the current day etc.].'

If no hour, day, month, or year is given, the current hour, day, month, or year is implied

For **"nugum"**, the number of a second, optionally a minute, an hour, a day, a month, and a year can be added as arguments:

(19) Bum dum dim   nugum.
      five   zero eight second
      'From 08:00:05 until 08:00:06 [on the current day, in the current month etc.].'

If no minute, hour, day, month, or year is given, the current minute, hour, day, month, or year is implied.

Temporal verbs are basically always used together with a conjunction and another statement, as described in the following section.

4.4 Temporal conjunctions (IV)

Sentences can be joined together with temporal conjunctions:

> Paragraph: [Statement] [Conjunction] [Statement] ...

(20)   Gim des pinam lem   dos   nas   pinom.
       PL   1   eat   after SG.2 food make
       'We eat after you make food.'

(See the section Conjunctions for a complete list.)

When multiple statements are involved, the conjunctions always refer to the nearest statement. Consider the following example with three sentences:

(21)   Des negem   lam   gim des pinam lem   dos   nas   pinom.
       1   be.hungy before PL   1   eat   after SG.2 food make
       'I was hungry before we ate after you made food.'

The statements implies the following:

1. The speaker was hungry.

2. They ate.

3. Food was prepared by the listener.

And the conjunctions imply the following:

- The speaker was hungry before they ate. (1 before 2)

- The food was prepared by the listener before they ate. (3 before 2)

If the speaker was hungry already before the food preparation started, or got hungry because of it, is intentionally left ambiguous in this example.

4.5 "Wrapping" (V)

There is a special group of verbs called "wrappers" in Letanis grammar. All "wrappers" begin with the syllable **"na-"**. Their meaning extends to the next sentence; they "wrap around" it.

A typical example is:

(22) Des nagom gum gabas pebam.
      SG.1 think   all   bird   fly
      'I think that all birds fly.'

When this "wrapped" statement is followed by a temporal conjunction and another statement, the "wrapped" statement is effectively perceived as a single sentence:

(23) Des nagom gum gabas pebam, lam   des   gim gababis pidem.
      SG.1 think   all   bird   fly   before SG.1 PL   penguins see
      'I thought that all birds fly, before I saw penguins.'

The second statement "des gim gababis pidem" refers to the previous "wrapped" statement as a whole, i.e. the person thought about birds in this way before the person saw penguins (for the first time). It does *not* mean that all birds flew before they saw penguines (and then stopped flying).

4.6 Nested conjunctions (VI)

Nested conjunctions offer a way to "wrap around" multiple statements at once.

The ordinary set of conjunctions (**"lam"**, **"lem"** etc.) is mirrored in the **"ga-"** category (which could be seen as a prefix), allowing for utterances like the following:

(24) Des natam: "Bebis pam galem gim bebos batus kam."
      SG.1 say   rain   be   (after) PL   cloud sky   be.at
      'I said: "There will be rain after the clouds are in the sky."'

Compare this to the utterance with a regular conjunction:

(25) Des natam "Bebis pam" lem gim bebos batus kam.
SG.1 say rain be after PL cloud sky be.at
'I said "There is rain" after the clouds were in the sky.'

In theory, there can be an arbitrarily deep nesting of wrapped statements, as the conjunctions are in fact recursively mirrored under **gaga**, **gagaga** and so on. In practice, nesting beyond one or two levels should be avoided, though.

5 Pragmatics

5.1 Copula

The verb **pam** ("to exist in a static manner") serves as the copular verb:

(26) Nubis pam.
ship be
'There is a ship.'

It is used to express identity:

(27) Nubis lanas pam.
ship home be
'The ship is a home.'

In this case, someone is apparently living in some kind of houseboat.

To express identity of multiple things, they need to be grouped using a variable pronoun first:

(28) Dos des tam, tas gim das pam.
SG.2 SG.1 a:a v:a PL human be
'You and I, we are humans.'

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5.2 Pronouns

5.2.1 Personal pronouns

The personal pronouns can be summarized in a traditional pronoun table as follows:

Person	Number	Animacy	Letanis	Translation
First	Singular	Humans	**des**	I
Second	Singular	Humans	**dos**	you [sg.]
Third	Singular	Humans	**das**	he/she[6]
Third	Singular	Animals	**gas**	it
Third	Singular	Objects	**pas**	it
First	Plural	Humans	**gim des**	we
Second	Plural	Humans	**gim dos**	you [pl.]
Third	Plural	Humans	**gim das**	they
Third	Plural	Animals	**gim gas**	they
Third	Plural	Objects	**gim pas**	they

Technically though, there are only two dedicated personal pronouns, the first person (**"des"**) and second person (**"dos"**), referring to speaker and listener, respectively.

Letanis does not make a gender distinction in the third person by default, but if needed, nouns from the **"di-"** category can be used to refer to humans, animals and plants of specific gender:

Person	Number	Animacy	Gender	Letanis	Translation
Third	Singular	Humans	male	**ditas**	he
Third	Singular	Humans	female	**dinas**	she
Third	Singular	Animals	male	**gitas**	it
Third	Singular	Animals	female	**ginas**	it
Third	Singular	Plants	male	**kitas**	it
Third	Singular	Plants	female	**kinas**	it
Third	Plural	Humans	male	**gim ditas**	they
Third	Plural	Humans	female	**gim dinas**	they
Third	Plural	Animals	male	**gim gitas**	they
Third	Plural	Animals	female	**gim ginas**	they
Third	Plural	Plants	male	**gim kitas**	they
Third	Plural	Plants	female	**gim kinas**	they

When referring to a set of heterogenous entities, variables are used instead of personal pronouns (see the Variables section).

The third person pronouns are just monosyllabic nouns from the corresponding category, and therefore identical to what would be considered demonstrative pronouns in other languages, as explained in the next section.

5.2.2 Demonstrative pronouns

There are no dedicated demonstrative pronouns in Letanis. Instead, to refer to an object, the monosyllabic noun from the corresponding category is used, for example:

(29)　las
　　　 house
　　　 'that [house]'

(30)　gas
　　　 animal
　　　 'that [animal]'

When in doubt, an object can be referred to as an arbitrary three-dimensional shape in the sense of "a thing":

(31)　pas
　　　 object
　　　 'that [three-dimensional shape]'

In conclusion, there is no grammatical or practical difference between what would be considered third person pronouns and demonstrative pronouns in other languages.

5.3 Possession

Possession is expressed using the verb **"pilam"** ("to have, to possess sth.").

(32)　Gim des budum ladus pilam.
　　　 PL　 1　 fifty　 brick　 have
　　　 'We have 50 bricks.'

Another option – depending on context – would be the locative verb **"kakem"** ("to be near sth."):

(33)　Budum ladus gim des kakem.
　　　 fifty　　 brick　 PL　 1　 be.near.us
　　　 '50 bricks are with us.'

5.4 Questions

5.4.1 Polar questions

Questions are not marked by any special grammatical rule. Instead, questions about the truth of a statement are expressed using the "wrapper" verb **"nagem"** ("I wonder if..."):

(34) Des nagem dos nenam galem dos las pidem?
SG.1 wonder.if SG.2 be.happy (after) SG.2 house see
'I wonder if you are happy after you see the house.'

If another speaker wants to answer positively, they may respond with:

(35) Nenam.
happy
'[I'm] happy.'

If they don't know (yet) either, they would respond with:

(36) Nagem.
wonder.if
'[I'm] wondering [too].'

Finally, to answer negatively, they would have to make a contradicting statement:

(37) Netom.
sad
'[I'm] sad.'

See also the upcoming section about Negation.

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5.4.2 Content questions

When something that could be referred to using a noun is unknown to the speaker, but they would like to inquire about it (content question), a sentence with the interrogative noun **"los"** is used:

(38) Dos los pidem?
SG.1 what see
'What do you see?'

5.4.3 Quantity questions

Pragmatically, the use of **"gem"** (unknown quantity) implies a question:

(39) Gim des gem ladus pilam.
PL 1 [?] brick have
'I don't know how many bricks we have.'

If another speaker knows the answer, they would respond with:

(40) Lis budum ladus pilam.
someone fifty brick have
'[We] have 50 bricks.'

If they don't know the answer, they may repeat the question:

(41) Lis gem ladus pilam.
someone [?] brick have
'I don't know how many bricks [we] have.'

5.5 Negation

It is not possible to negate a statement in Letanis. The philosophy of Letanis is that either something is true and you say it, or it isn't true and you don't say it at all.

If another person says something you believe isn't true, and you want to challenge its validity, you need to come up with a contradicting claim.

Consider the following statement:

(42) Gim nas las kim.
PL food house be.inside
'There is some food in the house.'

If a speaker is not sure if that's actually true, they could say:

(43) Nagem kim.
wonder.if be.inside
'[I] wonder if [there] is [actually food] inside.'

If a speaker knows that there is no food inside the house (or can't find it), but they would actually prefer it if there was some food, they may say:

(44) Des nas negetom.
SG.1 food miss
'I'm missing the food.'

5.6 Imperative

The imperative is not marked by any special grammatical rule. Instead, the "wrapper" verb **"napam"** (to want sth., to desire sth.) is used:

(45) Des napam dos pinonam.
SG.1 want SG.2 cook
'I want you to cook (something).'

5.7 Causality

Letanis follows the philosophy that the true cause and effect of events in the universe is ultimately hidden from mortal observers. As beings bound by linear experience of time, all that we can say is that events happen within a certain chronological order.

Therefore, causality is expressed in Letanis using temporal conjunctions. (See the section Conjunctions for a complete list.) For example:

(46) Des   negem   lem   des   pebim.
      SG.1 be.hungry after SG.1 swim
      'I'm hungry because I swam.'

5.8 Spelling

Letanis has a comparatively small phonetic inventory. To help with referring to objects in a world dominated by names which can be spelled using the Latin alphabet or some variant thereof, the **"lela-"**[7] noun space is reserved for names from languages using a Latin alphabet variant.

Letters of the Latin alphabet can be transcribed according to the following table:

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[7] mnemonic: "la" for "Latin"

Letter	Syllable	Mnemonic
a	"p**a**"	"p" + Latin vowel (!)
b	"**b**a"	Latin consonant + "a"
c	"si"	English pronunciation
d	"**d**a"	Latin consonant + "a"
e	"t**e**"	"t" + Latin vowel
f	"su"	fricative consonant + "u"
g	"**g**a"	Latin consonant + "a"
h	"so"	fricative consonant + "o"
i	"t**i**"	"t" + Latin vowel
j	"li"	lowercase letter "j" has dot, like "i"; but is longer overall, like "l"
k	"**k**a"	Latin consonant + "a"
l	"**l**a"	Latin consonant + "a"
m	"**m**a"	Latin consonant + "a"
n	"**n**a"	Latin consonant + "a"
o	"t**o**"	"t" + Latin vowel
p	"**p**e"	Latin consonant + "e" (!)
q	"ku"	English pronunciation
r	"le"	alveolar consonant + "e"
s	"**sa**"	Latin consonant + "a"
t	"**ta**"	Latin consonant + "a"
u	"t**u**"	"t" + Latin vowel
v	"mi"	labial consonant + "i"
w	"du"	"**d**ouble-**u**"
x	"ke"	English pronunciation (reversed)
y	"lu"	upper half of letter "y" looks similar to "u", lower half similar to "l"
z	"se"	English pronunciation

Because these names count as nouns, they must be terminated with "-s", for example:

(47) Des leladapamitidas nenatom.
      sɢ.1 "DAVID"   trust

      'I trust David.'

5.9 Past and future tense

A generic, unspecific past and future tense is expressed using **"lam nom"** ("before now") and **"lem nom"** ("after now"):

(48) Des babis pidem lam   nom.
      sɢ.1 moon see   before now.

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'I saw the moon.'

(49) Des babis pidem lem nom.
    SG.1 moon see   after now.
    'I will see the moon.'

5.10 Greetings

There are no interjections in Letanis. Instead, the verb **"pitabam"** ("to greet") without arguments is used as a universal greeting:

(50) Pitabam!
    greet
    'Hello!'

6 Lexicon

All words in Letanis begin with a syllable that indicates the semantic category they belong to.

Shorter words stand for general categories of meaning, while longer words stand for more specific concepts – hence the lexicon is called "topologically" organized.

The same "root" syllables are used for nouns and "other words", therefore the meaning remains ambiguous until the final consonant ("-m" or "-s") which indicates word class.

6.1 Nouns ("-s" words)

Nouns are organized in categories beginning with the following syllables:

	-a	-e	-i	-o	-u
b-	**ba** sky	**be** weather	**bi** water	**bo** geography	**bu** fire[8]
d-	**da** people	**de** 1ˢᵗ person	**di** gender	**do** 2ⁿᵈ person	**du** materials
g-	**ga** animals	**ge** *(reserved)*	**gi** gender	**go** *(reserved)*	**gu** *(reserved)*
k-	**ka** plants	**ke** *(reserved)*	**ki** gender	**ko** *(reserved)*	**ku** *(reserved)*
l-	**la** buildings	**le** names	**li** "skip"	**lo** questions	**lu** *(reserved)*
n-	**na** food	**ne** clothing	**ni** furniture	**no** tools	**nu** transport
p-	**pa** 3D shapes	**pe** 2D shapes	**pi** symbols	**po** economy	**pu** art
t-	**ta** *(variable)*	**te** *(variable)*	**ti** *(variable)*	**to** *(variable)*	**tu** *(variable)*

6.2 Other words ("-m" words)

So-called "other words" (verbs, numerals, and conjunctions) are organized in categories beginning with the following syllables:

-a	-e	-i	-o	-u	Word class
ba 1 one	**be** 2 two	**bi** 3 three	**bo** 4 four	**bu** 5 five	digits
da 6 six	**de** 7 seven	**di** 8 eight	**do** 9 nine	**du** 0 zero	digits
ga nested conj.	**ge** unknown ?	**gi** plural >1	**go** existential $\exists$	**gu** all $\forall$	quantifiers[9]
ka at/on/above	**ke** behind/below	**ki** inside	**ko** outside	**ku** far away	locative vs.
la before	**le** after	**li** when	**lo** at begin	**lu** at end	conjunctions
na "wrappers"	**ne** emotions	**ni** colors	**no** timepoints	**nu** timeframes	various vs.
pa static	**pe** intransitive	**pi** transitive	**po** *(reserved)*	**pu** *(reserved)*	action vs.
ta *(variable)*	**te** *(variable)*	**ti** *(variable)*	**to** *(variable)*	**tu** *(variable)*	assign. vs.

The **"b-"**, **"d-"**, and **"g-"** (except **"ga-"**) words are numerals, the **"l-"** (and **"ga-"**) words are conjunctions, and the other words are verbs.

6.2.1 Locative verbs

The following table lists all locative verbs of Letanis:

Word	Definition
kam	to be at/on/above sth.
kabam	to be to the North of sth.
kabem	to be to the East of sth.
kabim	to be to the South of sth.
kabom	to be to the West of sth.
kakam	to be on top of sth.
kakem	to be near sth., to pass by/along/around sth.
kakim	to be in front of sth.
kakom	to be above/over sth.
kalam	to be to the right of sth.
kalem	to be to the left of sth.
kem	to be behind/below sth.
kekem	to be behind sth.
kekum	to be below sth.
kim	to be inside sth., to pass through sth.
kikam	to be among sth.
kikem	to be between sth.
kikim	to be at the center of sth.
kikum	to be at the bottom of a river etc.
kom	to be outside sth.
kum	to be far away from sth.

For example:

(51)　Bebos babus kakim.
　　　 cloud　sun　 be.in.front.of
　　　 'The cloud is in front of the sun.'

The verb **kakem** ("to be near sth.") used with a single argument serves the function of the adverb "here":

(52)　Kas　tam. Tas nikam.　Tas kakem. Des　tas nemam.
　　　 plant a:a　 v:a　be.green v:a　be.near 1.SG v:a be.happy.about
　　　 'The green plant is here. I'm happy about it.'

6.2.2 Conjunctions

The following table lists all temporal conjunctions of Letanis:

Word	Symbol	Definition
lam	⌐⌴	A before B
lem	⌴⌐	A after B
lim	⹀	A when B
linim	⸳⌴	A during B
litem	⊏	A exactly when B
lom	⌐⌴	A overlaps with the beginning of B
lum	⌴⌐	A overlaps with the end of B
lolom	⊏	B continues after A (progressive aspect)

The conjunctions **"lam"** and **"lem"** describe strictly separate events. Maybe they happen right after each other, but they must not overlap.

The conjunction **"lim"** denotes a temporal overlap in the broadest sense: There is some overlap between both events, but it is not specified when or for how long.

The conjunctions **"linim"** and **"litem"** are more specific: **"linim"** says that first event was strictly shorter than the second event and happened within the second event, and **"litem"** says that both events happened at *exactly* the same time for the same duration.

The conjunctions **"lom"** and **"lum"** signify a specific temporal overlap at the beginning or end of the other event. These conjunctions are typically used in a locative sense, as in the following example:

(53) Des pebom lom   des bobos   kam.
      SG.1 walk   overlaps.with.the.beginning.of SG.1 mountain be.at
      'I walked to the mountain.'

Or:

(54) Des bobos   kam lum   des pebom.
      SG.1 montain be.at overlaps.with.the.end.of 1.SG walk
      'To the mountain, I walked.'

The conjunction **"lolom"** denotes a continuing event with unspecified duration, for example:

(55) Bedubedum   nudum lolom   des letanis pitam.
      two.thousand.and.twenty year   and.continuing SG.1 Letanis speak.
      'Since the year 2020, I speak Letanis.'

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6.3 Lexical symmetry

Letanis is a humble attempt at creating a topological language, and far from being perfect. Nonetheless it attempts to aid its speakers to mentally navigate the lexicon by providing a certain degree of symmetry.

Some words are "mirrored" in other categories, for example, the words for body parts of humans and body parts of animals are similar, even though they are in different categories, i.e. have different prefixes.

Similarly, symmetry appears on a smaller scale in several places of the lexicon. For example, the words

- "sun [of solar system currently referred to]" (**"babubus"**) and
- "star [outside of solar system currently referred to]" (**"babubes"**)

as well as

- "moon [of planet currently referred to]" (**"babibus"**)
- "moon [not of planet currently referred to]" (**"babibes"**)

both end in "**-bus**" and "**-bes**", respectively.

In general, the 40 "root" syllables are reused with similar meaning inside longer words where possible. For example, the word for "volcano" (**"bobobus"**) was created from the word "**bobos**" for "mountain" and the root syllable **"bu"** referring to a light/heat source. While this is, strictly speaking, not the same as noun compounding found in other languages, this lexical principle will hopefully make words more memorable despite Letanis' lack of actual compounding rules.

Another pattern that is sometimes recognizable, is reduplication of the last syllable to indicate "a smaller part of the aforementioned", as well as the syllable **"du"** (substance, element) as the final syllable for "extremely small part of the aforementioned". The final syllable **"tus"** is sometimes used to refer to something as a whole, as, for example, in **"batus"** ("sky"). These rules do not apply in all cases, however.

6.4 Online dictionary

A complete dictionary of Letanis can be found online at:

https://tmh.conlang.org/letanis/

6.5 Extensibility

Some of Letanis' root syllables are marked as "reserved" in the Lexicon tables given above. These may be used in the future, in case it turns out that Letanis needs some additional grammatical structures after all. Regardless, if speakers of Letanis wish to add new vocabulary that is related to a specific field and not considered general knowledge, it is recommended that they add them below the prefix **"go-"** for nouns and the prefix **"po-"** for verbs, respectively.

7 Appendix

7.1 Syntax summary

The following is a summary of Letanis' six syntax rules:

1. Statement: [Argument] [Argument] ... [Verb]

2. Noun phrase: [Numeral] [Noun]

3. Statements with the verb **"no-"** or **"nu-"**

4. Paragraph: [Statement] [Conjunction] [Statement] ...

5. Statements with "wrapper" verbs (**"na-"**) and their following statement are considered single statements in regards to conjunctions.

6. Conjunctions can be nested inside wrapped statements by using the prefix **"ga-"**, recursively if necessary.

Any text following these six rules is considered syntactically valid. Numbers made from digit syllables, and names spelled with Latin letters (**"lela-"**) must be evaluated on a morphological level.

Abbreviations

1	first person	PL	plural
2	second person	SG	singular