



First Steps in Lojban

Friendly manga-style beginner course (Hajiloji 2) —

English edition

About this edition

This English edition is an adaptation of *First Steps in Lojban*, affectionately nicknamed はじめてのロジバン 第2版 (*Hajiloji*) — a Japanese introductory Lojban course by **cogas**. The adaptation to English, with expanded content and interactive quizzes, was done by la gleki.

First Steps in Lojban since September 2013. In April 2015, the rollout of the *Second Edition (Hajiloji 2)* began.

In the first edition, the text was written by cogas (“Ginger”), with the adorable illustrations provided by Vae. Authors are deeply grateful to guskant for her ongoing guidance, to youxkei for improving the the original Japanese website for this migration, and to PJCG (the Young Lojbanists’ group) along with many others. Hajiloji only exists because of users like you and your generous support. **ki'e sai** — thank you all!

The "Big Picture" Approach

From the author:

While writing Hajiloji 2, my main focus was on maintaining a “*big picture*” perspective.

The original goal of Hajiloji was:

To make an introduction where you think, “Oh, Lojban isn’t such a big deal — it might even be easy!”

But due to some oversight on my part, the first edition ended up packing in so much detail that calling it an “introduction” was a bit of a stretch. Compared to older guides like *First Steps in Arca* or *First Steps in Esperanto*, complex topics started creeping in way too early.

So for Hajiloji 2, I returned to those inspirations, aiming for a *broad grasp* of Lojban. If you just want to *start speaking and writing* without drowning in deep theory first, this is the course for you.

Of course, if you’re looking to savor every nuance of the language, this might feel a bit brief. And if you’re the type who fusses over every technicality, you might find this course doesn't “scratch every itch” just yet.

To address that, Hajiloji 2 includes more *supplementary material* and *FAQ* notes for those finer details that often come up but might clutter the main lessons.

Another focus is the *de facto standard* usage. Lojban’s specifications allow for immense freedom, but explaining every possible permutation at once can quickly become overwhelming.

In this course, I want to use “*how most people actually speak Lojban*” as our model. Most speakers stick to ASCII and naturally favor something like *SVO* (Subject-Verb-Object) order. While exploring the full flexibility of Lojban is great, mastering a solid default first is even better.

Reference and BPFK

Even in the Hajiloji 2 era, grammar and semantics keep evolving.

Hajiloji 2 uses **CLL 1.0** as a reference, but for semantics it mostly follows **current BPFK** material. Articles (**le**, **lo**, etc.) in particular may differ from CLL — please keep that in mind.

So: pick up the telescope called Lojban and see what the world looks like through a new lens!

Lesson 1. Greetings

Characters



la .kocon.

- ⚙️ Koshon, or in Lojban, **.kocon.** (pronounced as *KO-shon*).
- ⚙️ Sora's childhood friend.
- ⚙️ Speaks Lojban quite well.
- ⚙️ He'll be serving as Sora's teacher throughout this course.



la .soran.

- ⚙️ Sora, or in Lojban, **.soran.** (pronounced as *SOH-rah*).
- ⚙️ A total beginner at Lojban.
- ⚙️ Learning the ropes from Koshon.



la .sevan.

- ⚙️ Sevan, or in Lojban, **.sevan.** (pronounced as *SEH-vahn*).
- ⚙️ Sora's younger sister.
- ⚙️ Surprisingly has the most Lojban experience in the family.
- ⚙️ A fountain of random Lojban trivia.

Let's get started!



la .kocon.

Hi everyone, **coi rodo!** I'm Koshon. Great to meet you all.



la .soran.

Yahoo! I'm Sora! ...Wait, Koshon, did you say "shoi rodo"?



la .kocon.

That's a greeting in Lojban, the constructed language. It means "hello, everyone."



la .soran.

Cool! When I hear “Lojban” I think of logic.



la .kocon.

Sharp eye! Lojban belongs to the *loglang* (logical language) family. Thanks to clever design, the grammar is remarkably simple and it's quite easy to pick up. Want to give it a try, Sora?



la .soran.

If you say it's easy... okay, I'll give it a shot!



la .soran.

Something like that, I guess.



la .kocon.

And we'll keep going from there.

Lesson 2. Pronunciation and the alphabet



la .kocon.

First things first: if you can't read it, you can't use it! So let's start with *pronunciation and the alphabet*.

Lojban is typically written in *ASCII*, which fits the internet age perfectly. While other scripts exist, ASCII is what most people use. Below are the letters we'll be using (*H*, *Q*, and *W* are not used). Here are approximate English hints — use the play buttons to hear each letter.

Letter	Approximate sound
a	“ah” (<i>spa</i>)
b	<i>b</i>
c	<i>sh</i>
d	<i>d</i>
e	<i>eh</i>
f	<i>f</i>
g	<i>g</i> as in <i>go</i>
i	<i>ee</i>
j	<i>zh</i> as in <i>measure</i>
k	<i>k</i>
l	<i>l</i>
m	<i>m</i>
n	<i>n</i>
o	<i>oh</i>
p	<i>p</i>
r	rolled or tapped <i>r</i>
s	<i>s</i>
t	<i>t</i>
u	<i>oo</i>
v	<i>v</i>
x	voiceless velar fricative (between <i>k</i> and <i>h</i>)
y	schwa (neutral vowel)
z	<i>z</i>
'	<i>h</i> -like glide <i>only between vowels</i>

The period . and comma , are punctuation (pause / syllable break), not letters in the same sense as the row above.



la .soran.

Got it. So it's basically the standard Roman-letter values, but without H, Q, or W.

The tricky ones seem to be *c* (*sh*), *x* (*that rasping sound*), and *y* (*the 'uh' sound*), right? What exactly is “x”?



la .kocon.

x is a voiceless velar fricative — between “k” and “h”. It’s like *ch* in Scottish *loch*, or *ch* in German *Bach*, or *j* in Spanish *Jose*, or *Kh* in Modern Arabic *Khaled*. Try pronouncing *ksss* while keeping your tongue down and you get this sound. Compare **c**, **k**, and **x**:

- ⚙️ **c**
- ⚙️ **k**
- ⚙️ **x**



la .soran.

(Uhh, velar-what now...?) I'll try those a few times before bed. And **y** is...?



la .kocon.

That's the *neutral vowel* – English *schwa*: like the vowel in *comma*, not the *y* in *misty* or *cycle*.



Relax your mouth and voice; you'll get something like it.



la .soran.

Got it. How do you *name* the letters? Ay, bee, cee?



la .kocon.

Consonants: [**consonant**] + **y** + . · Vowels: . + [**vowel**] + **bu**

Letter	Lojban name
a	.abu
o	.obu
b	by.
s	sy.
n	ny.

The . represents silence—a brief pause or a glottal stop. Keep in mind it is *not* a sentence-ending period like in English (we'll cover those later). Dots are used in letter names to ensure words don't accidentally blend together.

Also, a crucial rule: the **apostrophe** only ever appears *between two vowels*. You'll never see sequences like **k'a** or **d'e**. While the apostrophe sounds like a soft **h**, Lojban treats it as a special glide, *not* as a standard consonant like **b** or **m**.



la .soran.

Makes sense. **ts** and **tc** are like 'tz' and 'ch', and **dz** and **dj** are just their voiced counterparts. Simple enough!

Semivowels and diphthongs



la .kocon.

The chart covers most of it, but you should also know how *vowel clusters* work. The **lerfu** audio pack has no separate **ia** or **ua** files — only the trigraphs **aia** and **aua**, which are exactly **i** and **u** as semivowels between vowels:

aia	i + vowel → like a 'y' sound + vowel (e.g. <i>ia</i> sounds like "ya"). In aia , the middle i is that semivowel between two a 's.
aua	u + vowel → like a 'w' sound + vowel (e.g. <i>ua</i> sounds like "wa"). In aua , the middle u is that semivowel between two a 's.

In these clusters, **i** and **u** act as *semivowels*.



la .soran.

So **ies** is like English "yes".



la .kocon.

Exactly. Then we have **diphthongs**:

au	— sounds like "ow" in "cow"
ai	— like in "high"
ei	— like in "hey"
oi	— like in "boy"

These are always treated as *a single syllable*.



la .soran.

What about **ao** or **ea**?



la .kocon.

Lojban only recognizes those four as diphthongs. If you want to connect **a**, **e**, or **o** directly, you have to separate them with **i**, **u**, or an ' (apostrophe).



la .soran.

Fair enough.



la .kocon.

Quiz time! Try reading these sentences aloud.

Exercise

⚙️ Read the following Lojban aloud.

1. **coi ro do mi'e .soran. co'o .kocon.**
– Hello everyone; I'm Sora; goodbye, Koshon.
2. **mi prami do .i semu'ibo dunda lo melbi xrula**
– I love you, so I give a beautiful flower.
3. **.o'i mu xagji sofybakni cu zvati le purdi**
– (Watch out) five hungry Soviet cows are in that garden.



la .soran.

Okay, let's give it a go...

1. shoy... ro... do... mi-heh... so-rahn... sho-ho... ko-shon (something like that?)
2. mi pra-mi do... ee-seh-moo-hee-bo... doon-dah lo mel-bi khru-lah
3. oh-hee... moo... khahg-zhee... so-fuh-bahk-nee... shoo zvah-tee leh poor-dee

How was my accent?



la .soran.

“Soviet cows” – what even is that?



la .kocon.

The third one is a famous *pangram*: it uses *every Lojban letter*.



la .soran.

Whoa, you're right!



la .kocon.

It's a fun challenge! I even made my own—it includes diphthongs, semivowels, and those tricky affricates (**ts**, **tc**, **dz**, **dj**). Check this out:

.ua ja'o le mu tsali dzena cu djicai lo nu re xagji sofybakni cu
zvati tu noi tcadu vau .iepei

“Ah — so those five strong seniors really want two hungry Soviet cows to
be over there in that town, huh?”



la .soran.

That's *long*.

For phonology enthusiasts:

Here is a rough English-style pronunciation sketch of Koshon's pangram above:

.ua ja'o le mu tsali dzena cu djicai lo nu re xagji sofybakni cu zvati tu noi tcadu vau .iepei

UH-wah ZHAH-hoh leh moo TSAH-lee DZE-nah shoo jee-SHY loh noo reh KHAG-zhee SOF-ee-bak-nee shoo zVAH-tee too
noy CHAH-doo vow yeh-PEH-ee

Also, **r** may be trilled, American-style, tapped, uvular, and so on — all are acceptable. And here is an IPA sketch of Koshon's pangram above:

.ua ja'o le mu tsali dzena cu djicai lo nu re xagji sofybakni cu zvati tu noi tcadu vau .iepei

ʔwa ʒaho le mu tsali dzena fu dʒiʃaj lo nu ɾe xagʒi sofəbakni fu zvati tu noj tʃadu vau ʔjɛpɛj

Also, **r** may be [r], [ɾ], [r̥], [ʀ], etc. — all are acceptable (see reference).

Lesson 3. Parts of speech and stress



la .soran.

Wait, we never actually talked about *stress*. I was just guessing that it falls on the *second-to-last* syllable.



la .kocon.

Oh? And what led you to that conclusion?



la .soran.

I told you, it was a guess!



la .kocon.

Sure it wasn't a "cheat sheet" guess?



la .soran.

I swear, no cheat sheets! Forgive me! 🙏😬



la .kocon.

Anyway, Sora is right. In Lojban, you generally *stress the second-to-last syllable* of every word.



la .soran.

(Wow, just ignored me...) See? A woman's intuition is never wrong.



la .kocon.

In practice stress rules differ a bit by part of speech — so let's cover *parts of speech* while we're at it.



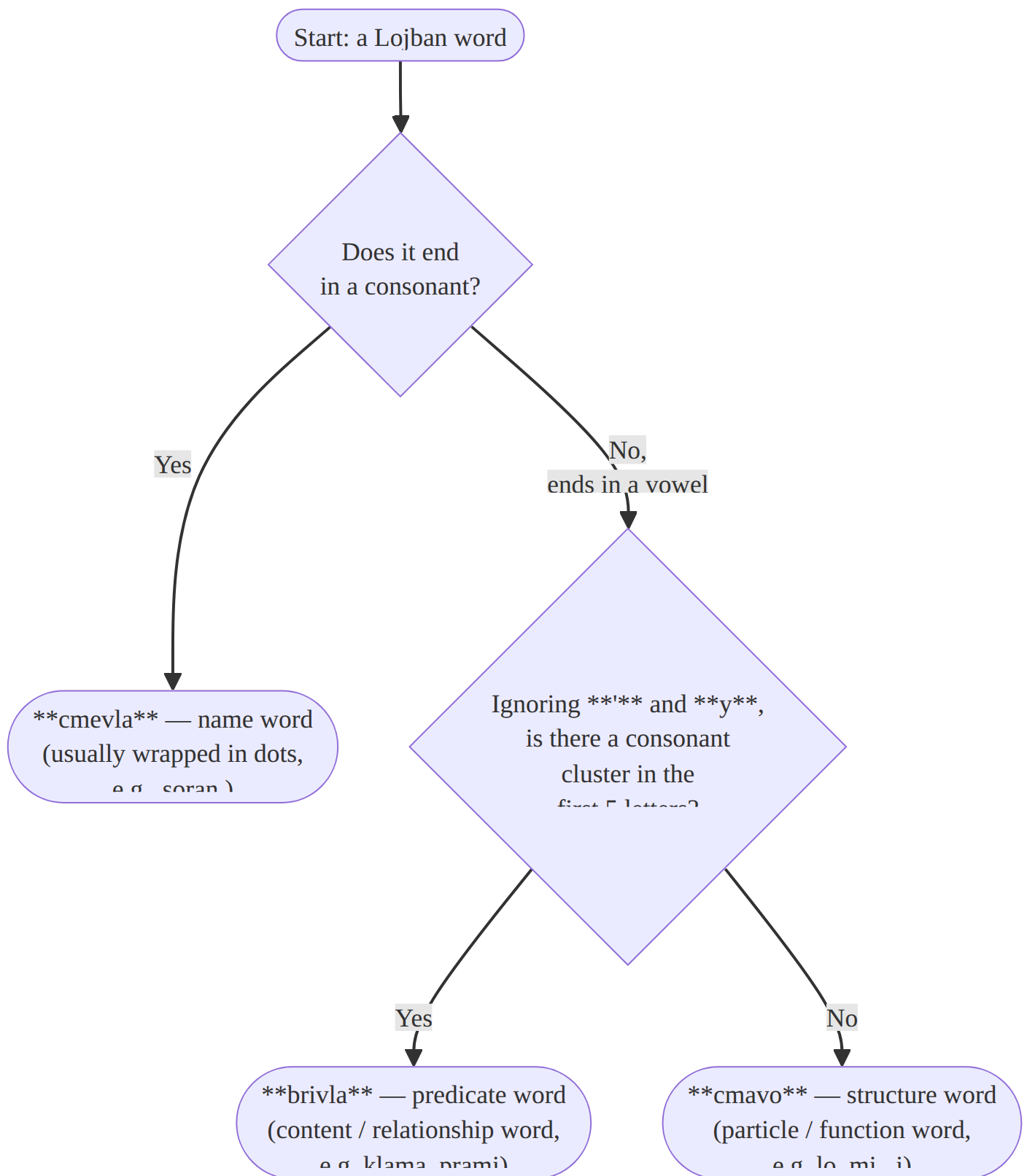
la .kocon.

In Lojban, "part of speech" is tied directly to *morphology* (the shape of the word). You can usually tell what kind of word it is just by looking at the spelling:

- ⚙️ **brivla** ("content word" or predicate): Ignoring ' and y, these have a *consonant cluster in the first five letters* and always *end in a vowel*.
- ⚙️ **cmavo** ("structure word" or particle): These have *no consonant clusters* and *no internal consonants* (unless it's at the very beginning), and always *end in a vowel*.
- ⚙️ **cmevla** (*name word*): The name-shaped tokens that follow **la**—they always *end in a consonant*, and in modern Lojban we usually wrap them in *dots* (e.g., **.soran.**). This is a *word shape*, not the same thing as the predicate **cmene** ("x₁ is the name of x₂"), which is a separate content word you'll see in phrases like **zo .soran. cmene mi** (Lesson 7).

Just remember that the apostrophe (the **h** sound) doesn't count as a "consonant" for these rules.

	Gloss	ends in	cluster in first 5 letters	consonants outside initial?
brivla	predicate	vowel	yes	yes
cmavo	particle	vowel	no	no
cmevla	name word	consonant	free	yes



la .soran.

Here's a quick *decision tree* to keep it straight:

1. *Does the word end in a consonant?* → treat it as **cmevla** (a name word; in modern usage usually wrapped in *dots*).
2. *Else (it ends in a vowel): ignoring ' and y, is there a consonant cluster in the first five letters?* → **brivla** (predicate word).

3. *Else* → **cmavo** (structure word): no internal consonants, so cmavo can be run together without spaces.



la .kocon.

Exactly. The big questions are: “Does it end in a consonant?” and “Is there a cluster in the first five letters?”

One cool thing: because **cmavo** never have internal clusters, you can actually *run them together without spaces*. For example, **pu zi ze'u ri'a vi ve'a** can be written simply as **puzize'uri'avive'a**.



la .soran.

That saves some space—though you have to be careful not to mistake a long chain of cmavo for a single long word!



la .kocon.

Let's revisit *stress* for a moment. It works like this:

- ⚙️ **brivla** and **cmevla**: *Stress the second-to-last syllable* (y is ignored and does not count as a syllable here).
- ⚙️ **cmavo**: Stress is *free*. However, if a cmavo comes right before a **brivla**, it's usually *not* stressed.



la .soran.

Stress freedom! Cmavo rules sound a bit fiddly, but “don't stress right before the predicate” seems like a solid default.



la .kocon.

True. For **cmevla**, there's also an exception: you can manually mark stress using *CAPITAL LETTERS* if you want it somewhere other than the second-to-last syllable. But for now, just sticking to the “*second-to-last*” rule is plenty.



la .soran.

Let's keep it simple for now! We can worry about the exceptions later.

Lesson 4. Basic sentence structure



la .soran.

First the sounds, then the word types... Alright, Koshon, lay that Lojban grammar on me! I'm ready for the "Super Grammar"!



la .kocon.

Let's start with basic *statements*. Think of a sentence as saying:

Who or what / does what / is like what / to whom / where...

Basically, you have "*the thing we're talking about*" and "*what we're saying about it.*"



la .soran.

Makes sense. Like "I eat this"—*I* and *this* are the "things," and *eat* is the "doing."



la .kocon.

Exactly. Borrowing terms from logic, we call the "doing/being" part the *predicate* (*selbri*), and the terms that fill its roles *arguments*. In Lojban those argument terms are **sumti**; the numbered roles x_1 , x_2 , ... are **terbri**, and their ordered sequence is the **terbri** (place structure). A full claim is a **bridi**.

Exercise

- ⚙ In each English sentence, pick out the predicate and its arguments (in Lojban terms: the **selbri** and the **sumti**):
1. That bird is blue.
 2. The man is drinking at the bar.
 3. This person is a woman.



la .soran.

Let me see... A **bridi** is built from a **selbri** and the list of **terbri** (slots) that are filled with **sumti**. The **selbri** is the *is/does* part, and the **sumti** are the *who/what* terms going into those slots. Right?



la .kocon.

Spot on.



la .soran.

Okay, next.



la .kocon.

Every Lojban predicate has a **terbri**—an ordered list of **terbriarmi** (place slots) labeled x_1 , x_2 , x_3 , ...:

- ⚙ x_1 is / does ...
- ⚙ x_1 does x_2 ...
- ⚙ x_1 is x_2 -ish to x_3 ...
- ⚙ and so on.

Think of x_1 , x_2 , **etc.** as numbered "holes" (**terbriarmi**) that you plug **sumti** into.

To make a sentence, just put the *sumti* in their numbered order and tuck the *selbri* in the middle. Simple, right?



la .soran.

Like:

(sumti for x_1) [selbri] (sumti for x_2) (sumti for x_3) ...



la .soran.

Wait, where *exactly* does the selbri go?

la .kocon.

Strictly speaking, the *selbri* can go *almost anywhere*—but most people put it *between* the **sumti** for x_1 and the **sumti** for x_2 , much like English *SVO* (*Subject-Verb-Object*).



la .soran.

That feels pretty natural.



la .kocon.

Right — a familiar default. Here are some **sumti** you can use already:

mi ≈ 'I / me'

do ≈ 'you'

zo'e ≈ 'something unspecified / "whatever"'

ti ≈ 'this'

ta ≈ 'that (near you)'

tu ≈ 'that (yonder)'

ra ≈ 'he / she / it / they (in context)'

Some predicates:

ninmu ≈ 'x₁ is a woman'

citka ≈ 'x₁ eats x₂'

zunle ≈ 'x₁ is to the left of x₂ from viewpoint x₃'

sanli ≈ 'x₁ stands on x₂ using legs/support x₃'

nelci ≈ 'x₁ likes x₂'

Exercise

⚙️ Translate into Lojban:

1. I am a woman.
2. You eat this.
3. She is to the left of that (from my perspective).
4. He stands there (with some legs/support).
5. I like you.



la .soran.

So, line up the sumti, tuck in the selbri...

1. **mi ninmu**
2. **do citka ti**
3. **ra zunle tu mi**
4. **ra sanli tu zo'e**
5. **mi nelci do**



la .kocon.

Perfect! We're taking it slow with the vocabulary, but you've already mastered the basic sentence structure.



la .soran.

Honestly, this might even be simpler than English for things like "they're to my left of that."



la .kocon.

Ready to put it into practice? Let's take a little field trip—there's a town I've been wanting to show you...



la .soran.

Ooh, an outing! Lead the way!

Lesson 5. Getting comfortable with predicates



Latcmatcad
la .lacmatcad.



la .kocon.

Welcome to *Latcmatcad*—the "Cat Town"! In Lojban, we write it as **la .latcmatcad.** (where **la** marks it's a name, and the dots are there to separate it from surrounding words).



la .soran.

Ooh! Cats! ...Wait, I don't see any...



la .kocon.

That's strange. Maybe they're in a meeting? While we wait for them to show up, let's talk about **.i** and **zo'e**.

.i:

Sentence boundary / start marker

zo'e ≈ 'Unspecified sumti — "something," "someone," "who cares for now"'

la .kocon.

When you're connecting multiple sentences, you use **.i** to mark the start of each new sentence. It's kind of like a reversed period (Lojban punctuation often feels a bit "backwards" to English speakers!).

.i ti blabi .i tu xekri*This is white. That is black.***blabi** ≈ ' x_1 is white'**xekri** ≈ ' x_1 is black'

la .soran.

We didn't use **.i** much in the previous lessons, did we?



la .kocon.

If you're only saying one sentence, you don't strictly need it. But when you're speaking in a flow, it's the standard way to separate your thoughts.



la .soran.

Got it: use **.i** between sentences. ...And we've seen **zo'e** before too, right?



la .kocon.

Exactly. Here's a very handy rule for keeping things concise:

You can almost always drop **zo'e** if it's at the very end of a sentence, or if it's in the x_1 slot (right before the selbri).

In other words: if a slot for "someone/something" is empty, Lojbanists assume you mean **zo'e**.



la .kocon.

Oh — cats! Look!



A cat

Illustration for *mlatu* in context.

la .soran.

Whoa, you're right – cats!



la .kocon.

Say it in Lojban:

 $mlatu \approx 'x_1 \text{ is a cat of species/breed } x_2'$ **mlatu****zo'e mlatu zo'e***"It's a cat." / "There's a cat."*

la .kocon.

Basically, leading **zo'e** and any **zo'e** hanging off the end of a sentence are optional. So **zo'e mlatu zo'e** can be shortened to just **mlatu**.

Here's the pattern:

⚙️ **zo'e** [selbri] [sumti] ... **zo'e zo'e** ... = [selbri] [sumti] ...

But be careful! Internal **zo'e** slots that aren't at the end cannot be dropped, or the other *sumti* will shift into the wrong places:

⚙️ [selbri] [sumti] **zo'e** [sumti] ≠ [selbri] [sumti] [sumti]



Many cats
Illustration for *so'i mlatu*.



la .soran.

mlatu .i mlatu .i mlatu .i mlatu...



la .kocon.

Quite the crowd! Let's take a walk and practice putting sentences together. I'll give you the words you need, and you just arrange them. Grab a pen and paper—if you're not sure which *sumti* to use for a given **terbricmi**, just use **zo'e** (and feel free to drop it if it's at the end!).

Composition practice

1. I am in Latcmatcad.

zvati \approx ' x_1 is at location x_2 '

- ⚙ **mi** = I
- ⚙ **la .latcmatcad.** = Latcmatcad (the so-called place).

2. Sora goes to Latcmatcad by this car.

klama \approx ' x_1 goes to x_2 from x_3 via route x_4 by means x_5 '

- ⚙ **la .soran.** = Sora
- ⚙ **lo vi karce ku** = this car

3. Koshon knows that Sora is in Latcmatcad.

djuno \approx ' x_1 knows that proposition x_2 is true, about topic x_3 , in epistemology x_4 '

- ⚙ **la .kocon.** = Koshon
- ⚙ **lo du'u la .soran. zvati la .latcmatcad. kei ku** = the proposition that Sora is in Latcmatcad

4. I like walking.

nelci \approx ' x_1 likes x_2 '

cadzu \approx ' x_1 walks on surface x_2 with limbs x_3 '

- ⚙ **lo nu cadzu kei ku** = the event of walking

5. Many cats are sleeping.

sipna ≈ 'x₁ sleeps'

⚙️ **lo so'i mlatu ku** = many cats

6. I'm happy I met you in Latcmatcad.

penmi ≈ 'x₁ meets x₂ at x₃'

gleki ≈ 'x₁ is happy about x₂'

⚙️ **do** = you

⚙️ **lo nu [bridi] kei ku** = the event that [bridi]

7. We're tired, so we drink coffee or tea.

tatpi ≈ 'x₁ is tired from x₂'

pinxe ≈ 'x₁ drinks x₂ from vessel/source x₃'

⚙️ **mi'o** = we (you and I)

⚙️ **.i se ki'u bo** = therefore (replaces the .i boundary)

⚙️ **lo ckafi ku .a lo tcati ku** = coffee or tea



la .soran.

Phew, I'm beat... a hot Earl Grey is exactly what I need right now.



la .kocon.

Nice work! You're really getting the hang of this. Check your answers below (remember, the bracketed parts are optional):

I am in Latcmatcad.

[.i] mi zvati la .latcmatcad.

Sora goes to Latcmatcad by this car.

[.i] la .soran. klama la .latcmatcad. zo'e zo'e lo vi karce ku

Koshon knows Sora is there.

[.i] la .kocon. djuno lo du'u la .soran. zvati la .latcmatcad. kei ku
[zo'e] [zo'e]

I like walking.

[.i] mi nelci lo nu cadzu kei ku

Many cats are sleeping.

[.i] lo so'i mlatu ku sipna

I'm happy to meet you in Latcmatcad.

[.i] mi gleki lo nu mi (or [zo'e]) penmi do la .latcmatcad. kei ku

We're tired, so we drink coffee or tea.

[.i] mi'o tatpi .i se ki'u bo (mi'o) pinxe lo ckafi ku .a lo tcati ku



la .soran.

So: pick the *selbri*, look up its **terbri**, and put a **sumti** in each **terbri****cmi**. That "fill-in-the-blanks" template is what you called the *Place Structure*, right?



la .kocon.

Exactly! **Place Structure** (*PS*) is the usual English name for a **selbri**'s **terbri**—the ordered **terbri****cmi** that define the relationship.



la .soran.

PS—got it. ...All this talk about tea and coffee is making me crave a crêpe!



la .kocon.

Mmm, PS and crêpes... a perfect combination!



la .kocon.

Wait, how are those related...?

Lesson 6. Compounds (tanru)



la .soran.

Crêpes are amazing! And wow, I still can't believe how many cats there were!



la .kocon.

Yeah... (There goes my diet...)



la .soran.

I'm all powered up now. Basic sentences are starting to feel like second nature!



la .kocon.

Great. Once you're comfortable with simple sentences (*bridi*), we can start fleshing out the words themselves for more detailed expression. First, let's look at how to expand our *selbri*.

Chaining brivla builds tanru



la .kocon.

In Lojban, you can chain multiple *brivla* (predicate words) together. This kind of chain is called a *tanru*.

blanu kanla mlatu

blue-eyed cat

blanu ≈ 'x₁ is blue'

kanla ≈ 'x₁ is an eye of x₂'

mlatu ≈ 'x₁ is a cat ...'



la .soran.

So the words on the left modify the ones on the right?



la .kocon.

Precisely. And here's the cool part: tanru grouping is always unambiguous. Lojban has strict rules for how these chains are interpreted.



la .soran.

So there's no "attachment ambiguity"?



la .kocon.

Exactly. The rules are very logical. Of course, the downside is that sometimes the grammar might force a grouping you didn't intend—so you have to pay attention.

The basic rule is simple: *each word (or group of words) on the left modifies the immediate word to its right.*

((blanu kanla) mlatu)

((blue eye) cat) — a "blue-eye" type of cat

(((stedu xunre) finpe) citka) mlatu)

(((red-head) fish) eating) cat) — a cat that eats red-headed fish

stedu ≈ 'x₁ is a head of x₂'

xunre ≈ 'x₁ is red'

finpe ≈ 'x₁ is a fish ...'

citka ≈ 'x₁ eats x₂'



la .soran.

In natural languages, a phrase like "red-headed fish-eating cat" can be interpreted in several ways. But Lojban forces a single, specific structure.



la .kocon.

That's what we mean by Lojban's *syntactic precision*. Tanru are a perfect example of that.



la .soran.

Lojban doesn't mess around, does it?

Tanru meanings are flexible



la .kocon.

While the *structure* is precise, the *meaning* of a tanru is actually quite flexible. It usually just means "a Y that has something to do with X" or "an X-ish Y."

blanu mlatu

blue cat — this could mean *blue fur*, *blue eyes*, or even *a cat wearing a blue collar*. Context decides the specifics.



la .soran.

Humans fill in the usual reading.



la .kocon.

In ordinary situations, trust your intuition.

A tanru is still a selbri



la .kocon.

A *tanru* functions as a single *selbri*. Its *place structure* is determined by the rightmost word (the "anchor" or "head" of the chain).

So, both **blanu mlatu** and **stedu xunre finpe citka mlatu** share the same place structure as the basic word **mlatu**.

ti blanu mlatu

this is some kind of blue cat.

tu stedu xunre finpe citka mlatu

that is a red-headed fish-eating cat (species unspecified).

Lesson 7. Articles



la .soran.

Hrrrgh...



la .kocon.

Good morning! Why the long face?



la .soran.

I was just going over my notes, and I realized I only know a handful of *sumti*—and most of them are just pronouns like "me" or "you."



la .kocon.

That's a fair point. Today, let's learn how to turn any word into a *sumti*.

lo turns a *selbri* into a *sumti*



la .soran.

Exactly. How do I talk about a "woman" or a "cat" as a thing? Is there a word for "the" or "a"?



la .kocon.

Remember our predicates **ninmu** and **mlatu**?



la .soran.

"Woman" and "cat". Yep, got it.

ninmu ≈ 'x₁ is a woman'

mlatu ≈ 'x₁ is a cat ...'



la .kocon.

Those are *brivla*. If you wrap a *brivla* (or even a *tanru*) in **lo ... ku**, it turns into a *sumti* meaning "the thing(s) that fit the x₁ slot of that predicate."



la .soran.

So **lo** is like an article? And what's **ku** for?



la .kocon.

ku is a *terminator*—it tells the listener exactly where the *description* ends. Lojban is very explicit about its structure.

lo ≈ 'Generic article: "some thing(s) fitting x₁ of the following *selbri*"'

ku ≈ 'Terminator closing *lo/le* phrases'



la .soran.

So **lo ... ku** acts like brackets around a *description*.

lo ninmu ku nelci lo mlatu ku

The woman likes the cat. / Some woman likes some cat.



la .kocon.

Precisely. **lo [selbri] ku** basically means "some thing that is (or does) [selbri]."



la .soran.

So with words we know:

- ⚙ **lo blabi ku** – something white
- ⚙ **lo citka ku** – an eater
- ⚙ **lo sanli ku** – someone standing
- ⚙ **lo cadzu ku** – someone walking
- ⚙ **lo klama ku** – someone going
- ⚙ **lo sipna ku** – a sleeper
- ⚙ **lo gleki ku** – someone happy
- ⚙ **lo tatpi ku** – someone tired



la .kocon.

Just think of **lo** as "pulling out" that first place slot (x_1). And this works for *tanru* too:

lo sipna ninmu ku

sleeping woman

lo stedu xunre finpe citka mlatu ku

red-headed fish-eating cat

la turns *cmevla* into *sumti*



la .soran.

la .soran., la .latcmatcad. — is **la** also an article?



la .kocon.

Yes. **la** before *cmevla* (name words—the dotted, consonant-final pieces like **.soran.**) means “the thing called ...”

la ≈ ‘Name article: “the one(s) called [by the following *cmevla* / name word(s)]”

la .soran.

Sora (so-called)

la .kocon.

Koshon

la .latcmatcad.

Latcmatcad



la .soran.

No **ku** after **la**?



la .kocon.

There are complications...



la .soran.

Never mind then!



la .kocon.

Each *cmevla* (name word) must *end in a consonant*. If your name ends in a vowel, you just add one—usually **s** or **n**.



la .soran.

So my name becomes **.soran**. Self-intro... **la .soran. cmene mi**?

cmene ≈ ‘Predicate “...is the name of...” (a *brivla*, not a *cmevla* name token): x_1 (text) is the name of x_2 to namer x_3 ’



la .kocon.

Not quite! **cmene** here is the *predicate* “ x_1 is the name of x_2 ”—not the same idea as a *cmevla* (the name-shaped word **.soran.**). The x_1 of **cmene** has to be the name *text* (often marked with **zo**), not “whoever **la** points at.” **la .soran.** picks out the person; saying what you’re called uses patterns like **zo .soran. cmene mi**.



la .soran.

So how *should* I introduce myself?



la .kocon.

To say “My name is Sora”, you can use **zo** (which we’ll cover later) or **me** (which we’ll see in Lesson 15):

zo .soran. cmene mi

“soran” is my name (*string*).

mi me la .soran.

I am (one of) Sora / I am Sora-ish (we'll refine me).

Or attitudinal intro in Lesson 25:

mi'e .soran.

I'm Sora.



la .soran.

Simplest is probably **mi'e**.

le picks out something *specific*



la .soran.

Wait, doesn't Lojban distinguish between "the cat" and "a cat"?



la .kocon.

Not in the way English does. **lo** is our workhorse—it's very general and covers both cases.



la .soran.

"When in doubt, use **lo**." Got it.



la .kocon.

There's also **le**, which we use for "*the specific one(s) I'm thinking of.*" It's still referring to the x_1 slot, but the speaker is singling it out.

le \approx 'Specific article: x_1 of *selbri*, as singled out by the speaker'



la .soran.

Like saying "that one thing I was talking about..."



la .kocon.

Roughly. Practically speaking, if you can use **le**, you can almost always use **lo** instead. **le** is just a *more specific tool* in your kit.



la .soran.

When in doubt, **lo**—I think I can remember that!

Lesson 8. Conversion (SE)



la .kocon.

Next, let's look at how we can manipulate our *selbri*—which, in practice, opens up a whole new set of tricks for our *sumti*.



la .soran.

Manipulation, huh? Sounds like we're getting into the advanced stuff!



la .kocon.

It's actually very intuitive. The *SE series* of words can be attached to a *selbri* to *swap* its x_1 slot with one of the others (x_2 , x_3 , x_4 , or x_5).

se \approx 'swap x_1 and x_2 '

te \approx 'swap x_1 and x_3 '

ve \approx 'swap x_1 and x_4 '

xe \approx 'swap x_1 and x_5 '



la .soran.

"Swap"? How does that work in practice?



la .kocon.

Example with **klama**:

klama \approx 'x₁ goes to x₂ from x₃ via x₄ by means x₅'

mi klama ta
ta se klama mi
I go there.

mi klama zo'e ti
ti te klama zo'e mi
I go from here.

mi klama zo'e zo'e tu
tu ve klama zo'e zo'e mi
I go via there.

mi klama zo'e zo'e zo'e ti
ti xe klama zo'e zo'e zo'e mi
I go using this.



la .soran.

I see! So **se** swaps places 1 and 2, **te** swaps 1 and 3, and so on.



la .kocon.

Exactly. These *conversion* words don't change the underlying meaning—they just change the *perspective* of the sentence.



la .soran.

Is it really worth the extra words?



la .kocon.

Definitely! For one thing, if you only care about a recipient or a tool and don't care about the giver or the user, it saves you from having to use a bunch of **zo'e**:

[zo'e] klama zo'e zo'e zo'e ti

ti xe klama [zo'e]

(Someone) goes using this.



la .soran.

Hmm, I guess that is cleaner.



la .kocon.

But the real magic happens when you combine it with **lo**! This lets you *turn any place slot into a description or title*:

lo klama ku

goer (x₁ of klama)

lo se klama ku

destination (x₁ of se klama = x₂ of klama)

lo te klama ku

origin

lo ve klama ku

route

lo xe klama ku

vehicle / means



la .soran.

Whoa, that's a huge power-up for our descriptions!



la .soran.

Oh, I get it now! That's what you meant by "widening sumti tricks."



la .kocon.

Bingo. Whenever you're stuck, just remember: with **se/te/ve/xe**, you can use **lo** to *extract any slot from x_2 to x_5* .

Lesson 9. Tagging places (FA)



la .soran.

We've covered a lot of ground—simple sentences, *tanru*, articles, *conversion* words... I think I'm starting to get the hang of this!



la .kocon.

Good! Today we're looking at the **FA series**. This is mostly a trick for *readability and making sentences more compact*.



la .soran.

The "FA series"? What's that about?



la .kocon.

Example:

mi klama zo'e zo'e zo'e ti

I go, using this (x₅).



la .soran.

Right, we saw that in the previous lesson.



la .kocon.

It feels a bit clunky with all those **zo'e**'s, doesn't it?



la .soran.

I guess. But without them, **mi klama ti** would just mean "I go to this place" (x₂), rather than "using this tool" (x₅).



la .kocon.

Exactly! *FA words* let you assign a following **sumti** to a specific **terbricmi** (x₁, x₂, ...), no matter where it appears in the sentence:

mi klama fu ti

I go... using this (x₅).



la .soran.

Oh, so we can just skip all the middle "zo'e" slots by tagging the one we actually want!

fa ≈ 'the following *sumti* fills x_1 '

fe ≈ 'the following *sumti* fills x_2 '

fi ≈ 'the following *sumti* fills x_3 '

fo ≈ 'the following *sumti* fills x_4 '

fu ≈ 'the following *sumti* fills x_5 '



la .kocon.

Just one thing to keep in mind: *Conversion (SE)* is always applied *before* the FA tags. So if you use both, the FA tags count according to the *new* converted **terbri**.

Exercise

⚙ Translate to English:

1. **mi dunda fi do**
2. **lo nanmu ku tavla fo la .lojban.**
3. **lo verba ku ciska fi lo pelxu pelji ku lo pinsi ku**

dunda ≈ ' x_1 gives x_2 to x_3 '

nanmu ≈ ' x_1 is a man'

tavla ≈ ' x_1 talks to x_2 about x_3 in language x_4 '

verba ≈ ' x_1 is a child ...'

ciska ≈ ' x_1 writes text x_2 on medium x_3 with tool x_4 '

pelxu ≈ ' x_1 is yellow'

pelji ≈ ' x_1 is paper ...'

pinsi ≈ ' x_1 is a pencil/crayon'



la .soran.

(1) I give (something) to you. (2) The man speaks in Lojban. **fo** puts **la .lojban.** into the x_4 slot!



la .kocon.

Right! And (3) is the real test. Here's the key rule: after you tag a *sumti* with a *FA* word, any following untagged *sumti* just follow in order from that point. They "fall in line."



la .soran.

Okay, let's see. The *selbri* is **ciska** (*writes*). The first **sumti** is "the child" (x_1). Then we see **fi**, which puts the yellow paper in x_3 . So the next word, **pinsi** (*pencil*), must fill x_4 !

So: The child writes on yellow paper with a pencil.



la .kocon.

Spot on! You just combined articles, tanru, and *FA* tags all in one go.



la .soran.

I'm on fire!



la .soran.

Naturally!

Lesson 10. Abstractions (noun clauses)



la .kocon.

We're almost halfway through! This is a great time to learn about *abstractions*—what we call "*noun clauses*" or "*that...*" clauses in English.

From Lesson 5, recall:

la .kocon. djuno lo du'u la .soran. zvati la .latcmatcad. kei ku
Koshon knows that Sora is in Latcmatcad.

djuno \approx ' x_1 knows proposition x_2 ...'

mi nelci lo nu cadzu kei ku

I like walking.

mi gleki lo nu mi penmi do la .latmatcad. kei ku

I'm happy that I met you in Latmatcad.



la .soran.

I see the pattern:

- ⚙️ **lo nu** [sentence] **kei ku** – the *event* where [sentence] happens.
- ⚙️ **lo du'u** [sentence] **kei ku** – the *proposition* that [sentence] is true.



la .kocon.

Exactly. While English often just uses "that" for both, Lojban distinguishes between an *event* and a *proposition* (along with several others).



la .soran.

Wait, what exactly is a "proposition"?



la .kocon.

Think of it as the "content" of an idea—the kind of thing you believe, doubt, or claim as true.



la .soran.

A bit fuzzy, but I think I get the gist.



la .kocon.

Lojban dictionaries will tell you whether a word normally takes **nu** or **du'u** in its slots. You'll develop a feel for it as we go.

The general pattern is: **lo** [Abtractor] [sentence] **kei ku**

The word in the middle is called an *abtractor* (or a *NU-series cmavo*). We'll start with just **nu** and **du'u**.

lo nu ≈ 'article + abtractor: event of the following *bridi*'

lo du'u ≈ 'article + abstractor: proposition of the following bridi'

kei ≈ 'terminator closing the abstraction's bridi'



la .kocon.

There are several others like **ka**, **ni**, **si'o**, and so on, but let's stick to these two for now.



la .soran.

It still feels a little... well, abstract.



la .kocon.

Let's have some practice!

Exercise

⚙️ Translate to English:

1. **mi badri lo nu le ninmu ku morsi kei ku**
2. **lo nu citka lo plise ku kei ku pluka le cipni ku**
3. **le nanmu ku birti lo du'u le plise ku kukte kei ku**
4. **lo nu tadni la .lojban. kei ku cinri mi**
5. **mi jinvi lo du'u do melbi kei ku**

badri ≈ ' x_1 is sad about x_2 '

morsi ≈ ' x_1 is dead'

plise ≈ ' x_1 is an apple ...'

pluka ≈ ' x_1 pleases x_2 ...'

cipni ≈ ' x_1 is a bird ...'

birti ≈ ' x_1 is certain proposition x_2 holds'

kukte ≈ ' x_1 is tasty to x_2 '

tadni ≈ ' x_1 studies x_2 '

cinri ≈ ' x_1 interests x_2 '

jinvi ≈ ' x_1 opines that x_2 ...'

melbi ≈ ' x_1 is beautiful ...'



la .soran.

Roughly:

1. I'm sad that the woman died.
2. Eating that apple pleases the bird.
3. The man is certain (of the proposition) that the apple is tasty.
4. Studying Lojban is interesting to me.
5. I think you are beautiful.



la .kocon.

Excellent! You can think of them as building *noun clauses* with a clear closing tag (**kei**).



la .soran.

kei ku feels like a lot of typing... So **nu** [sentence] **kei** is basically a *selbri* by itself?



la .kocon.

Technically, yes—*abstractors* take a full sentence and build a new *predicate* out of it. But in practice, you'll almost always see them wrapped in **lo ... ku** to turn them into *arguments* (*sumti*).



la .soran.

So **nu** means "...is an event" and **du'u** means "...is a proposition." If you say I don't need to overthink it, I won't!

Lesson 11. Dropping terminators; cu



la .soran.

I've been on a bit of a decluttering kick lately.



la .kocon.

Oh? Do tell.



la .soran.

Tossing out old junk just feels *so good!*



la .kocon.

It's a rare sight to see you being so tidy! Want to try some *decluttering in Lojban* while you're at it?



la .soran.

What do you mean? Is there junk in the language too?



la .kocon.

The "junk" that most beginners (and even pros) want to get rid of are *terminators*—all those repetitive **ku**'s:

**lo ninmu ku klama lo tcadu ku lo zdani ku lo zarci
ku lo karce ku**

The woman goes by car from home via the shop to the city.

tcadu ≈ 'city ...'

zdani ≈ 'nest/home ...'

zarci ≈ 'shop ...'

karce ≈ 'car ...'



la .soran.

Ugh, five **ku** tokens in a single sentence! That's a lot of work.



la .kocon.

Well, Lojban actually lets you *omit terminators* whenever your *intended meaning* is clear to the listener. The golden rule is:

If dropping it doesn't change how the sentence is parsed, you can throw it away.



la .soran.

That sounds like a bit of a judgment call...



la .kocon.

Here are the *ABCs of Elision*:

1. *End-of-sentence terminators*: You can almost always drop these.
2. **ku**: You can usually drop this, *except* when it's right before the *selbri*.
3. **kei**: Be very careful with this one. *Don't drop it* unless it's at the end of the sentence.

The key is that your "brackets" must still be unambiguous to the listener.



la .soran.

So:

lo ninmu ku klama lo tcadu lo zdani lo zarci lo karce



la .soran.

Wait, why *can't* we drop **ku** right before the *selbri*?



la .kocon.

Look at what happens if you do:

lo ninmu klama lo tcadu ...

That turns it into a *tanru* ("woman-type goer")! The listener won't know where the *description* ends and the *main verb* begins.



la .kocon.

Precisely.



la .soran.

So that one **ku** has to stay? That's kind of annoying.



la .kocon.

There's a better way! You can use **cu**—the *selbri* marker. It tells the listener "the main verb starts here," and it effectively *closes* all open *descriptions* before it.

cu ≈ 'Marks the start of the *selbri*; ends all open structure before it.'

lo ninmu cu klama lo tcadu lo zdani lo zarci lo karce



la .soran.

Now that's much cleaner!



la .soran.

And what was the deal with not dropping **kei** in the middle of a sentence?



la .kocon.

Words like **nu** and **du'u** are *greedy*—they will keep swallowing the following words into the sub-clause until they hit a **kei**. If you drop **kei**, they might swallow the rest of your sentence! **cu** can also act as a stop-gap, but it's safer to keep the **kei** visible unless it's at the very end.



la .soran.

Got it: **lo/le** *descriptions* are easy to close, so **ku** is often gone. But *abstractions* (**NU**) are *greedy*, so keep the **kei** around until the very end.

Lesson 12. Tense: time and space



la .kocon.

Tense in Lojban is straightforward: just put a *PU*-series word *immediately before the selbri*.

ca ≈ 'now'

pu ≈ 'before (past)'

ba ≈ 'after (future)'

mi ca citka lo plise

*I am eating the apple **now**.*

mi pu citka lo plise

*I ate an apple (in the **past**).*

mi ba citka lo plise

*I will eat an apple (**later**).*

citka ≈ 'x₁ eats x₂'

plise ≈ 'x₁ is an apple ...'



la .soran.

Simple enough. But what do you mean by "tag"?



la .kocon.

ca, **pu**, and **ba** are what we call *tags*. They "stick" to the following word and give it a specific time or place context. For now, we'll just stick them onto the *selbri*.



la .soran.

Got it. They're like little context stickers!

Compound tags



la .kocon.

You can get even more specific by adding *distance* words after your time direction: **zi** for "near" and **zu** for "far."

	zi	zu
pu	a little before	long ago
ba	soon	far future

zi ≈ 'short distance in time (after PU)'

zu ≈ 'long distance in time (after PU)'

mi pu zi citka lo plise

I ate an apple a short while ago.

mi ba zu citka lo plise

I'll eat an apple in the distant future.



la .soran.

Direction plus distance—that's a neat little system.



la .kocon.

That creates a *compound tag*. And we can take it even further by adding *duration*: **ze'i** for a short duration and **ze'u** for a long one.

ze'i ≈ 'short extent of interval'

ze'u ≈ 'long extent of interval'

mi pu ze'i bajra

I ran for a short time in the past.

mi ba zi ze'u bajra

I'll soon be running for a long time.

bajra ≈ 'x₁ runs on x₂ ...'



la .soran.

So the order goes: *Direction* → *Distance* → *Duration*. I think I can remember that.

Space: FAhA, VA, VEhA



la .kocon.

The exact same pattern works for *space* too! In Lojban, time and space use the same parallel structure (we call both "tense" in a broad sense).

The template is: *Direction* → *Distance* → *Dimension* (area/region).

FAhA (direction), **VA** (distance), **VEhA** (extent).

ca'u ≈ 'in front of...'

ri'u ≈ 'to the right of...'

zu'a ≈ 'to the left of...'

vi ≈ 'near (the spatial version of **zi**)'

vu ≈ 'far (the spatial version of **zu**)'

ve'i ≈ 'small region (spatial duration)'

ve'u ≈ 'large region (spatial duration)'

le nanmu ba zi ze'u ca'u vu ve'u bajra

That man will, a bit later, for a long time, run far ahead in a wide area.



la .soran.

That's a lot of little words to stack up, but at least the template is consistent.



la .soran.

Wait, we didn't use any of these tags in the earlier lessons. What tense were those sentences in?



la .kocon.

Tense is completely optional. If you don't use any tags, the time and place are just understood from context—much like how Japanese leave things like singular/plural or tense vague when it's already obvious.



la .soran.

But will people actually understand me?



la .kocon.

Of course! Natural languages leave out massive amounts of detail all the time, and we still communicate just fine.



la .soran.

Alright, so the lesson is: *omit the tags when it's clear, and add them when you need to be precise.*

Lesson 13. Aspect (event contours)



la .kocon.

Continuing our look at context tags, let's talk about *aspect* (or *ZAhO cmavo*). This tells you which *phase* of an event you're referring to.



la .soran.

Which phase? You mean like... stages?



la .kocon.

Think about the act of *running*:

- ⚙ The state *before* you start.
- ⚙ The moment you *begin*.
- ⚙ The act while it is *ongoing*.
- ⚙ The moment you *stop*.
- ⚙ The moment you *finish*.
- ⚙ The state *after* you've finished.

Lojban has a specific tag for each of these "slices" of an event.



la .soran.

I see. So for something like "eating an apple," we could talk about being about to eat, starting to eat, being in the middle of eating, stopping, finishing, or having already eaten.



la .kocon.

Exactly! And just like tense tags, these *aspect tags* go *immediately before the selbri*.

pu'o ≈ 'prospective—about to happen'

co'a ≈ 'inceptive—the start of the act'

ca'o ≈ 'progressive—the act is ongoing'

co'u ≈ 'cessative—the act has stopped (perhaps prematurely)'

mo'u ≈ 'completive—the act is successfully finished'

ba'o ≈ 'perfective—the act is done / in the aftermath'



la .soran.

Right — it really is the tense follow-up: tags go *before the selbri*. So my try at the pattern would be:

mi pu'o citka lo plise

I'm about to eat the apple.

mi co'a citka lo plise

I begin eating the apple.

mi ca'o citka lo plise

I'm eating the apple.

mi co'u citka lo plise

I finish eating the apple.

mi ba'o citka lo plise

I've already eaten the apple.



la .kocon.

You can also *combine tense and aspect!* The standard order is tense first, then aspect.

mi pu zi ba'o citka lo plise

A little while ago, I had just finished eating the apple.

Exercise

⚙️ Lojban for:

1. Sora is about to go to sleep now.
2. Koshon is in the middle of drinking water from the river.
3. That beautiful bird flew away long ago.
4. That man just died. (Hint: treat "dying" as the "cessation of living".)

sipna ≈ 'x₁ sleeps'

pinxe ≈ 'x₁ drinks x₂ from x₃'

rirxe ≈ 'x₁ is a river ...'

djacu ≈ 'x₁ is water'

melbi ≈ 'x₁ is beautiful ...'

cipni ≈ 'x₁ is a bird ...'

cliva ≈ 'x₁ leaves x₂ ...'

jmive ≈ 'x₁ is alive ...'



la .soran.

Alright, let's try these! 1: **la .soran. ca pu'o sipna** 2: **la .kocon. ca'o pinxe lo djacu ku lo rirxe ku** 3: **le melbi cipni pu zu ba'o cliva** 4: Wait, "That man over there"... is that **vu nanmu** (far man)? So, **lo vu nanmu ku**?



la .kocon.

Spot on. **lo vu nanmu ku** means "the distant man" or "that man over there."



la .soran.

Then 4 is: **lo vu nanmu pu zi co'u jmive.**



la .kocon.

Exactly! Another nice side benefit: putting *tense or aspect tags* before a *selbri* also *marks the start of the verb*, acting much like the **cu** we learned earlier. It prevents "accidental *tanru*" from forming.



la .soran.

Oh, cool! So if a *selbri* is tagged, it can't be mistakenly swallowed as part of a compound word on its left.



la .kocon.

Correct. And just like before, once you've built your tagged *selbri*, you can wrap the whole thing in **lo ... ku** to turn it into a description.



la .soran.

So we can basically nominalize an entire phased event. That's powerful!

Lesson 14. Sumtcita (tagged sumti)



la .kocon.

We've seen how *tense* and *aspect tags* work before the *selbri*. But these tags have *another* major job: they can be placed *before a sumti*, acting much like *prepositions* in English.

A *sumti* with a tag in front of it is called a **sumtcita** (tagged *sumti*). You can place them anywhere a normal *sumti* can go—most often at the beginning or end of a sentence.



la .soran.

So far tags sat on the *selbri* — e.g. **le nanmu ba zi ze'u ca'u vu ve'u bajra**.



la .kocon.

Right. You can also say things like:

pu lo nu do klama ti kei ra cliva ti

Before you came here, they left here.

mi ctuca do fo lo lojbo ca lo bavlamdei

I teach you Lojban tomorrow.

lo nanla cu cmila ti'a do

A boy laughs behind you.

**mi tavla lo pendo fo lo lojbo ba lo nu penmi do kei bu'u la .latc-
matcad.**

After meeting you, I talk to my friend in Lojban in Latcmatcad.



la .soran.

I see. So these tags are versatile—they act like adverbs when they're on the selbri, and like prepositions when they're on a sumti.



la .kocon.

Exactly. And here's a shorthand: if you want to use a tag with an unspecified place (**zo'e**), you can just use **tag + ku**. It turns out **ku** is a very busy word!

pu ku mi penmi do

I meet you (at some time) before (now).



la .soran.

Does the tagged sumti modify the whole sentence, then?



la .kocon.

Generally, yes. You can think of the tagged *sumti* as providing the context for the entire *bridi*. For example: "I meet you; and this whole event took place *before* some reference time."



la .kocon.

We have another family of tags called *BAI*—these are *modal tags* derived directly from *brivla*. The meaning of the tag corresponds to the x_1 slot of its source word. (And just like before, you can use **se/te/ve/xe** to swap those slots!)

ti grusi jubme fi'e lo patfu

This grey desk, father created (it).



la .soran.

Ah, so **fi'e** means "by the creator" because it's derived from the x_1 of **finti** (to create).



la .kocon.

Precisely! *BAI* tags *pull out* the x_1 of their source *brivla*. And if you use those swapping words (**se**, **te**, etc.), you can access the other slots, too. It's exactly the same logic we used with **lo se klama**.

Here are some common ones: **bau** (in language...), **gau** (done by agent...), **ka'a** (going with...), **ka'ai** (together with...), **ki'u** (for the reason...), **pi'o** (using tool...).

mi ciska bau lo ponjo

I write in Japanese.

tu cu blanu gau le nanmu

That is blue by the man's doing.

mi lacpu lo bloti se ka'a lo xamsi

I pull the boat toward the sea.

la .kocon. cu citka lo grute ka'ai lo nixli

Koshon eats fruit with the girl.

mi cortu lo jamfu ki'u lo nu ze'u bajra kei

My feet hurt because I ran a long time.

ra ca'o zbasu lo stizu sepi'o lo xance

They're making a chair using their hands.



la .soran.

Whew, that's a lot of new vocabulary to digest.



la .kocon.

Sorry about that! I might have gotten a little carried away. Since we're officially at the halfway point, now is probably a perfect time to take a breather, *review* your notes, and try to commit some of these to memory.

Lesson 15. Copulas: me and du



la .kocon.

Let's take a break from tags for a bit and talk about *copulas*—the "be-verbs." Specifically, how to say things like "A *is* B" when B isn't just a simple predicate.



la .soran.

You mean like when we're setting two things equal to each other?



la .kocon.

Something like that. Remember, we already have sentences like **ti mlatu** (this is a cat) or **ti bloti** (this is a boat), which don't need any extra words for "is."



la .soran.

True. But I still don't know how to say something like "This is Sora" or "That is the specific boat we were talking about."



la .kocon.

Good point! Lojban handles this in a few ways. Let's start with **me**.

me ≈ 'Before a sumti: *selbri* meaning "x₁ is among / identical with [that sumti]" (see dictionary for full places).'



la .kocon.

When you say *A me B*, you're saying one of three things: that A is *among* the items in group B, that A is *identical* to B, or that A's group is a *subset* of B's group.

Basically, think about "the things A points at" and "the things B points at":

- ⚙️ If every thing A refers to is also something B refers to, you're using **me** (it's either a member of B or a sub-group of B).
- ⚙️ If A and B refer to exactly the same set of things, that's *identity* (co-reference).

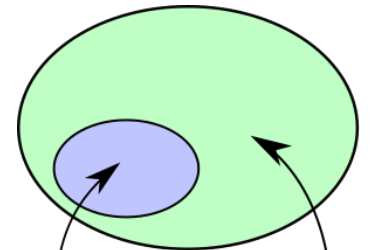
In simple terms: *everything that is A is also B*.

If I tried to draw that "A sits inside B" idea, it might look like this:

For example:

lo vi nanmu cu me lo dinju cikre

This man is one of the building-repair crew.



"A"

"B"

****me** (overlap / inclusion)**

Rough picture: what A refers to is covered by what B refers to.



la .kocon.

Be careful! **me** is *not* used to talk about literal *parts* of a whole (like a wheel being part of a car). For that, we use the word **pagbu**.

lo vi klupe cu pagbu le minji

This screw is a part of the machine.



la .soran.

Got it. **pagbu** for the "part-of" relationship, and **me** for "membership" or overlap.



la .kocon.

If you want to express *strict identity* (A and B are exactly the same thing), we use the word **du**.

du ≈ 'x₁ is identical to x₂'

ti du la .mikan.

This is Mika.

tu du le bloti

That is the boat.

du, like **me**, is a *cmavo* that can act as *selbri*.

Lesson 16. Negation

You may notice more vocabulary per chapter from here on: the *skeleton* of Lojban is mostly set, so we widen expression and reading practice.



la .kocon.

Up until now, we've mostly dealt with straightforward *statements*. But what if you want to say that something *isn't* the case? It's time to tackle *negation*.

The simplest way is to place the word **na** immediately before the *selbri*. This basically says, "It is not true that..."

na ≈ 'negates the bridi; typically immediately before the selbri.'

mi na catra le gerku

I am not killing the dog.

la .miran. na dasni lo crino kosta

Milan is not wearing a green coat.

mi na du la .kocon.

I am not Koshon.

catra ≈ 'x₁ kills x₂ by method x₃'

gerku ≈ 'x₁ is a dog of species/breed x₂'

dasni ≈ 'x₁ wears x₂ as garment x₃'

crino ≈ 'x₁ is green'

kosta ≈ 'x₁ is a coat of material x₂'



la .kocon.

Just like the tense tags we saw earlier, placing **na** before the selbri also clearly marks where the verb begins. It can even take the place of **cu**.



la .soran.

That's remarkably simple! Is there an opposite word? Like a way to say, "Yes, it really *is* true!"



la .kocon.

There certainly is! That would be **ja'a**. It works exactly like **na**, but it affirms the entire sentence instead of negating it.

ja'a ≈ 'emphatic affirmation before selbri.'

do ja'a ca jmive

*You **are** (really) alive right now.*

ti ja'a prenu .i na minji

*This **is** a person; it's not a machine.*

prenu ≈ 'x₁ is a person (psychological sense)'

minji ≈ 'x₁ is a machine for purpose x₂'



la .soran.

Nice — paired particles that work the same way.



la .kocon.

So, **na** and **ja'a** deal with the truth of the *entire sentence*. But we also have the *NAhE*-series of words, which allow you to tweak the meaning of the *selbri* itself (similar to how *SE* works).

These words let you build new shades of meaning: the opposite, a neutral midpoint, or just something "other than" the standard definition.

to'e ≈ 'the logical opposite (*polar meaning*)'

no'e ≈ 'the neutral midpoint (*not X, not its opposite*)'

je'a ≈ 'the strong affirmation ("*it really is [selbri]*")'

na'e ≈ 'something else ("*other than the usual sense of [selbri]*")'

mi prami do / mi to'e prami do

I love you / I hate you (the opposite of love).

lo vi tanxe cu barda / lo vi tanxe cu no'e barda

The box is big / The box is medium-sized (not big, not small).

lo nu cilre fi lo lojbo gerna cu je'a zdile mi

Learning Lojban grammar really is fun for me.

prami ≈ 'x₁ loves x₂'

tanxe ≈ 'x₁ is a box for contents x₂, material x₃'

barda ≈ 'x₁ is big in property x₂ compared to x₃'

cilre ≈ 'x₁ learns fact x₂ about subject x₃ from source x₄ by method x₅'

gerna ≈ 'x₁ is the grammar of language x₂ regarding property x₃'

zdile ≈ 'x₁ is fun for x₂ in aspect x₃'



la .kocon.

Keep in mind that *NAhE* words don't act as sentence markers like **na** or **cu** do. The *[NAhE] + selbri* combination is still treated as a single unit and can still form part of a *tanru*.

lo crino to'e barda

green small-ish thing

lo na'e crino kosta

a non-green coat (a coat of some other color)



la .soran.

From the definitions alone, **na** and **na'e** don't look *that* different...



la .kocon.

na negates the *entire claim* (it says the whole sentence is false). **na'e** simply points to a *different predicate* ("not green" still implies we're talking about a color—it's what we call "suggestive negation").

la .miran. na dasni lo crino kosta

It's false that Milan wears a green coat (maybe naked, maybe other coat).

la .miran. cu dasni lo na'e crino kosta

Milan is wearing a coat that is something other than green.



la .soran.

Oh, I see. So **ti na nanmu** means "This thing is not a man" (it could be a rock for all we know). But **ti na'e nanmu** suggests it's *something like* a man or has a gender, but specifically is *not* a man.



la .kocon.

In general, **na** is your safe default for negation. Use the **NAhE** series when you want that specific "it's another kind of..." nuance.



la .soran.

Negate with **na**, refine with **NAhE**. Simple!

Lesson 17. Questions



la .kocon.

Today's topic: *questions!* There are two main families: *truth questions* (yes/no) and *fill-in-the-blank questions* (for things or actions). First, a quick test, Sora—translate: "*I am not a human.*"

Exercise

⚙️ Lojban?

remna ≈ 'x₁ is a human'



la .soran.

mi na remna—but hey, I definitely *am* human!

Truth questions: **xu**



la .kocon.

Good—glad to see you haven't forgotten **na**. To ask a *yes/no question*, just place the word **xu** at the beginning of the sentence (or right after the **.i** marker).

xu ≈ 'An attitudinal word that asks whether the sentence is true.'

[.i] **xu lo vi prenu cu mamta mi**

Is this person my mother?

mamta ≈ 'x₁ is x₂'s mother'



la .soran.

What kind of example is that...? And what's an "attitudinal"?



la .kocon.

Attitudinals express emotions or attitudes—we'll cover them in detail in the finale. For now, the important question is: how do you *answer*? You can use **go'i** to mean "Yes, that's right" or **na go'i** for "No, that's not it."

.i xu lo vi prenu cu mamta mi

Is this my mother?

— **.i na go'i .i tu mamta do**

*No, I'm not. **That** woman over there is your mother.*

go'i ≈ 'pro-brid*i*; repeats the previous brid*i*.'



la .soran.

(Wait, so she *wasn't* your mother?) So **go'i** basically *repeats* the previous statement, right?



la .kocon.

Exactly. Grammatically, **go'i** acts as a *selbri* that means "the same as the last sentence." So **na go'i** just means "that sentence isn't true." This is usually all you need for answering *yes/no* questions.



la .soran.

Got it. English *yes/no* flips on *negative questions* — how does Lojban handle that?



la .kocon.

It's a common stumbling block! In Lojban, **go'i** echoes the *exact* previous statement. If you're asked a negative question like "*Is it true you're NOT my mother?*", a plain "yes" or "no" can be confusing. To be perfectly clear, you can use **ja'a go'i** to strongly affirm the positive version of the sentence.

.i xu lo vi prenu na mamta mi

Is this person not my mother?

ja'a go'i

(affirms the positive inner bridi — roughly "yes, they are your mother.")

Wh- questions: ma



la .kocon.

For "*fill-in-the-blank*" questions, use **ma**. You just place **ma** exactly where the thing you're asking about would go. You can even use several in one sentence! The listener answers by giving the missing information in the same order.

ma ≈ 'Asks a question that needs a thing (*sumti*) as an answer.'

.i mi ca catlu ma

What am I looking at?

— **.i lo patfu**

Father.

catlu ≈ ' x_1 looks at / watches x_2 '



la .kocon.

To ask *when*, *where*, *why*, or *how*, just combine a tag with **ma**. For example: **ca ma** (*when*), **bu'u ma** (*where*), **ki'u ma** (*why*), or **ta'i ma** (*how*—from **tadji**, meaning *method*).

ca ma ≈ '*when*'

bu'u ma ≈ 'where (at ...)'

ki'u ma ≈ 'why (with what reason)'

ta'i ma ≈ 'how (by what method)'

mo – selbri question



la .kocon.

mo replaces the *selbri*: "What is x_1 / what is going on?" Answer with a *selbri* – same idea as **ma**, different slot.

mo ≈ 'Asks a question that needs an action or attribute (*selbri*) as an answer.'

.i lo vi prenu cu mo

Who or what is this person? (What's their relationship to the topic?)

– **.i ja'a patfu**

They are (truly) my father.



la .kocon.

Exactly. **mo** can even be used inside *tanru*—for instance, **mo nanmu** means "What kind of man?"

Exercise

- ⚙️ Lojban / English drill (see Japanese edition for full table): book location; restaurant location; "what sees what"; finished eating; **ma jalge ...** riddle.



la .kocon.

Watch **zvati** vs **stuzi** place structure when asking "where is the restaurant?" – **ma stuzi le gusta** vs **le cukta pu zvati ma**.

Lesson 18. Commands and requests



la .kocon.

Now let's look at how to *urge* someone to do something: *commands*.

To make an imperative sentence, you just *replace "do" with the word ko*.

ko ≈ 'The imperative "you"; it covers a wide range from strict commands to polite requests.'

ko stali ta

Stay there.

ko na kusru mi

Don't be mean to me.

lo prenu cu prami ko

Be someone that people love.



la .soran.

So putting **na** before the *selbri* with **ko** means "don't..." That last example is interesting—it takes a moment to wrap my head around it.



la .kocon.

ko can fill any **terbricmi** – the command is "make this *bridi* true."



la .soran.

So instead of ordering someone to love you, **lo prenu cu prami ko** is more like "Behave in a way that *results* in people loving you."



la .kocon.

ko alone already spans “do it” through “please do”; that covers most imperative needs.



la .kocon.

If you want to add more nuance—like making a polite request, a suggestion, or granting permission—you can use *attitudinals* at the start of your sentence:

.e'o:

request

.e'u:

suggestion

.e'unai:

warning against

.e'a:

permission

.e'anai:

forbiddance

.e'i:

constraint / obligation

.e'inai:

release / “up to you”



la .kocon.

(Plus **pei** for “may I?” patterns — see below.)



la .soran.

Some sentences keep **do** instead of **ko** — proposals and permissions aren't always *straight imperatives*.



la .kocon.

We'll go deeper into the **nai** suffix in the finale. But generally, if it's a suggestion or a request rather than a direct order, it's very common to use **do** instead of **ko**.

You can also use the word **pei** to turn an *attitudinal* into a question:

pei ≈ 'Turns the preceding attitudinal word into a question.'

.e'a pei mi lasna do lo bitmu lo dunja badna

May I stick you to the wall with a frozen banana?

— **nai**

No.



la .soran.

I see. So **nai** flips the attitude, similar to how **to'e** flips a *brivla*. This is getting deep!

Lesson 19. Relative clauses and phrases

This chapter includes some *pedagogical choices* that may differ from other references; for ordinary communication it should be fine.



la .kocon.

Relative clauses allow you to attach extra information to a *sumti*. You can use a full sentence with **poi** or **noi**, or a simple link to another thing with **pe** or **ne**.

poi / noi + ku'o

poi ≈ 'restrictive relative — narrows which referents'

noi ≈ 'non-restrictive — adds side comment'

ku'o ≈ 'closes NOI-clause'

ke'a ≈ 'resumptive pronoun inside the clause (defaults to *x₁*-ish if omitted)'

mi citka ti poi ke'a lenku

I eat those of these that are cold (only the cold ones).

mi citka ti noi ke'a lenku

I eat this, which, by the way, is cold (adding a detail).



la .kocon.

The key difference is that **poi** *restricts* the group you're talking about, while **noi** just adds an incidental *description*.

ku-internal relatives

la .kocon.

Whether you place the relative clause inside the description (**lo [selbri] poi ... ku**) or after it (**lo [selbri] ku poi ...**) can slightly change the meaning. For most everyday talk, either works, but check the reference grammar if you need to be extremely precise.

pe / ne – sumti–sumti links

pe ≈ 'restrictive "related to..."'

ne ≈ 'non-restrictive "incidentally related to..." (like an appositive)'

pe sumti ≈ **poi ke'a srana sumti** (and **ne** ≈ **noi** version).

lo nicta pe lo cabdei

The night of this day (tonight).

.e'o ko jgari lo kabri ku pe do

Please pick up the cup that belongs to you.

po'u / no'u – identity appositives

po'u ≈ **poi ke'a du**; **no'u** ≈ **noi ke'a du**.

mi no'u la .kocon. cu ctuca do

I, Koshon, teach you.

le mikce po'u le misno cu zvati lo vi spita

The doctor—specifically the famous one—is at this hospital.

Exercise

- ⚙️ Parse: **.i lo bruna poi vu xabju cu benji lo dakli ku po'u lo narju mi ne lo nurma** (see answer key in Japanese PDF or unpack with textbook).

Lesson 20. be, bei, be'o (*sumti* links into *selbri*)



la .kocon.

We widen *selbri* → practically *sumti* again (like Lesson 8).



la .soran.

Déjà vu!



la .kocon.

It's a similar pattern: **be** and **bei** allow you to *fill the slots* of a *brivla* while it's still being used as part of a *description*.

mi citka lo plise

I eat an apple.

The predicate **citka** has x_1 eater, x_2 food.



la .kocon.

If you want to turn "eating an apple" into a single property, you'd say: **citka be lo plise**. This creates a new concept: "eats-apples."



la .soran.

So **lo citka be lo plise** would be "an apple-eater"!

be ≈ 'Links the following *sumti* into the x_2 *terbricmi* of the preceding word.'

bei ≈ 'Links further *sumti* into the next available *terbricmi* (x_3 , x_4 , etc.)'

be'o ≈ 'A terminator that ends the chain of links when needed.'

mi klama lo klaji be la .latcmatcad.

I go to the street(s) of Latcmatcad.

lo ckule be fi lo lojbo bei fu la .mikan. cu se stuzi ma

Where is the Lojban school run by Mikan located?

ko na pencu lo nenri be lo tanxe be fi lo pelji

Don't touch what's inside the paper box.



la .soran.

Why **bei** after the first *sumti*?



la .kocon.

If we used **be** for every link, complex nested structures would become impossible for the parser to untangle. **bei** ensures that the groupings stay perfectly clear.



la .kocon.

These **be**-phrases can even be used inside *tanru*, and you can use **be'o** to stop the chain before it accidentally swallows the next word in your description.

Explore the toolkit: Notice the subtle differences between:

- ⚙️ **ti lumci be lo dinju be'o minji**
- ⚙️ **ti dinju lumci minji**
- ⚙️ **ti me lo minji poi ke'a lumci lo dinju**
- ⚙️ **ti minji lo nu lumci lo dinju**

Lesson 21. Numbers



la .kocon.

Time for numbers! The digits are **pa, re, ci, vo, mu, xa, ze, bi, so, no** (1–9, 0). Notice that most of the vowels follow the *a, e, i, o, u* pattern (though **mu** breaks it slightly by using **u**).

To make larger numbers, you just string the digits together: **pano** (10), **recivo** (234), or **renopamu** (2015).

li – the number as sumti

li ≈ 'The number article; it turns a number into a sumti (an argument).'

lo'o ≈ 'The terminator for **li**; you can almost always leave this out.'

li xa pilji li re li ci

6 is the product of (multiplies) 2 and 3.

lo nu le nixli cu limna cu mentu li reno

The girl swam for 20 minutes.

lo vi nanba cu grake li sovo

This loaf of bread weighs 94 grams.

li so pi'e cimtu tcika lo nu mi co'a cikna

9:35 is the time that I woke up.

pi'e ≈ 'A sub-number separator, used for things like clock times and dates.'

Counting lo / le sumti

You can specify a quantity by putting the number right after the article: *[lo / le] + [number] + [selbri]*.

lo mu verba cu kelci lo re bolci

Five children are playing with two balls.

mei

[number] mei → *selbri* “x₁ is a set/cardinality N ...” – combine with **noi** for “these N things.”

pi (decimal point), **ki'o** (thousands separator), and **xo** (the question word for “how many?”). We also have general quantifiers like **ro** (all), **so'i** (many), and **so'u** (few).

lo xo prenu cu klama ti

How many people are coming here? — mu — Five.



la .kocon.

There's a lot to memorize here, but for now, focus on the *digits*, the article **li**, and how to use them with **lo**. You can pick up the more advanced quantifiers as you need them!

Lesson 22. Quotation



la .kocon.

Next up: *quotation*! We'll look at how to quote Lojban directly and indirectly, plus some handy tricks for referring back to things you've already said.

Grammatical Lojban – lu ... li'u

lu ≈ ‘The opening quote for grammatically correct Lojban text.’

li'u ≈ ‘The closing quote (make sure not to confuse it with **lu'u**!).’

do cusku lu mi prami do li'u mi

You said to me, “mi prami do.”

If you need to quote Lojban that *isn't* grammatically correct (like a list of random words or an unfinished sentence), you can use the more flexible **lo'u ... le'u** brackets.

Quote just one word: zo

mi se cmene zo .soran.

My name is the word "soran."

zo pu cu cmavo

*The word "**pu**" is a cmavo.*

zo quotes exactly *one* single word following it. (Even if that word is one of those compound words like "puzi", it only grabs the "pu" part!)

Non-Lojban — zoi X ... X

When you need to quote anything that isn't Lojban at all, you use **zo**i. You pick any word as a "delimiter" to mark the beginning and end of your quote. (People often just repeat the word "zo" as the delimiter.)

Indirect speech — du'u / se du'u

do cusku lo se du'u mi prami do kei mi

You said that I love you (expressing that particular idea).

Discourse sumti — di'u, di'e, ...

These are like pronouns for entire sentences. **di'u** refers to "that thing I just said," and **di'e** refers to "the thing I'm about to say."

la'e — "the referent of"

.e'o mi'o zgana la'e zoi py. My Neighbor Totoro py.

le ninmu cu cisma .i mi gleki la'e di'u

She smiled; I'm happy about that (specifically, her smiling).

la'o — non-Lojban names with delimiters

.e'o mi'o zgana la'o py. My Neighbor Totoro py.

Exercise

- ⚙ Use the word **fanva** to say: "Translating 'dog' from Japanese to Lojban yields **gerku**."
- ⚙ How would you ask "What is 'dog' in Lojban?" using **ma**?

fanva \approx ' x_1 translates text x_2 to language x_3 from language x_4 yielding x_5 '

Lesson 23. Logical connectives



la .kocon.

Before we dive into the deep end, here's a *non-logical* connective: **jo'u**. This is what you use when you just want to group two things together like a bundle, meaning "X and Y together."

mi jo'u la .soran. cu klama lo briju be la .xekir.

Sora and I (together as a group) go to Xekir's workplace.

Logical connectives — shape families

	sumti	sentence	tail	forethought
A (OR)	.a	.ija	gi'a	ga ... gi ...
E (AND)	.e	.ije	gi'e	ge ... gi ...
O (IFF)	.o	.ijo	gi'o	go ... gi ...
U (whether)	.u	.iju	gi'u	gu ... gi ...
question	ji	.ije'i	gi'i	ge'i ... gi ...

The rule of thumb is: use the *vowel* to pick the *logic* (AND, OR, etc.), and the *consonant/shape* to pick *what* you're connecting.

You can also add **na** or **nai** to these connectives to get negative variations like "neither X nor Y" or "X but not Y." You can find full tables for these in the *CLL* or in most Lojban cheat-sheets.

Sentence connectives .i jV

ti glare .ije ta lenku

This is hot and that is cold.

mi citka .ija mi sipna

I eat or I sleep.

do citka .ije'i do sipna — .ijenai

Are you eating or sleeping? — I'm (truly) eating, not sleeping.

Sumti connectives .V

mi cortu lo cutne .e lo stedu

My chest and head hurt.

gi'V — bridi-tail connectives (shared front)

mi klama lo zarci gi'e te vecnu lo tsasmani

I go to the shop and I buy a gorilla.

Forethought gV ... gi ...

Exercise

⚙️ Rewrite: **mi citka .ija mi sipna** → **ga citka gi sipna**, etc. (see full drill in source lesson).

Order note: **na** placement differs between afterthought and forethought forms — check examples.

Lesson 24. Pronouns and pro-bridu

Personal and demonstratives

mi, mi'o, mi'a, ma'a, do, do'o ≈ 'The personal pronouns (me, us, you-all). Lojban is very specific about whether "we" includes the listener.'

ti, ta, tu ≈ 'Demonstratives: this (near me), that (near you), and that yonder (far from both). These are used for pointing to things that are physically present.'

ri is one of the most common words in Lojban—it repeats the *very last complete sumti* mentioned. It's normally used for third-person "it" or "him/her."

mi cirko lo mapku .i ri crino

I lost a hat; it is green.

If **ra** or **ru** feel too vague, you can always narrow them down with a relative clause: **ra noi ...**

These refer to the slots of the current sentence: **vo'a** refers to the x_1 slot, **vo'e** to x_2 , and so on.

mi cusku lo se du'u vo'a prami vo'i kei do

I say to you that I love you.

go'i is used to repeat an entire previous statement. You can even place new *sumti* after it to *override* specific slots in the original sentence.

.i ti pixra .i lo se go'i cu tcati .i lo te go'e cu me la .xekir.

This is a picture; its subject (x_2) is tea; and the person who made it (x_3) is Xekir.

You can use **goi ko'a** to assign a short name like **ko'a** to something you've just mentioned, or **cei broda** to assign a temporary action word. These are mostly used in legal or technical documents.

Letter variables

Initial-letter sumti for nearby **la / le / lo** phrases are a common shorthand; letters can act as *sumti*.

This is the "whatchamacallit" word—you use it when you can't think of the right verb but the meaning is clear from context.

lo moklu be do cu co'e

Your mouth is... well, busy (or whatever is obvious from context).

.i mi klama lo gusta .i .e'u co'e

I'm going to the restaurant. Care to join? (Or any other suggestive action).

Lesson 25. Attitudinals (UI)



la .kocon.

Finally, we have *attitudinals*. These are "contextual stickers" that attach to a word to express how the speaker feels about it, but they don't change the underlying grammar of the sentence. They're what make Lojban feel "alive."

Examples:

.a'o, .au, .ie, .iu, .ua, .ue, .ui, .u'i:

hope, desire, agreement, fondness (love), discovery (aha!), surprise, happiness, amusement

.i .ui mi jimpe fi la .lojban.

(Yay!) I understand Lojban.

.i .a'o mi mitre li papibi

I wish I were 1.8 m tall.

lo .iu vi titla cu kukte

This sweet thing (which I'm fond of ♡) is tasty.

You can adjust the strength of your emotion by adding words like **cai** (intense), **sai** (strong), or **ru'e** (slight). You can also use **nai** to flip the meaning (like from happy to sad) or **cu'i** for a neutral feeling.

COI – vocatives

coi, co'o, mi'e, ki'e, je'e, vi'o, di'ai, fau'u + optional sumti + **do'u**.

coi la .soran. mi'e la .kocon.

Hello, Sora! I'm Koshon.

ki'e lo sidju — je'e

Thanks for the help! — You're welcome.

You can put **pei** after an attitudinal to ask "Do you feel that way too?" A standalone **pei** just asks "How are you feeling about this?"

For the full list of these expressive particles, you can dive into the *UI* and *COI* sections of *The Complete Lojban Language* or look at a reference card. There's a whole "zoo" of them to explore!

Lesson 26. Closing...?



la .kocon.

And that, my friend, was the *main course*—congratulations! You've officially made it through the basics of Lojban.



la .soran.

.ui cai—We actually did it! I can't believe how much we've covered.



la .kocon.

It really is an impressive list: pronunciation, basic sentences (bridi), compounds (tanru), place structures (SE and FA), abstractions (NU), time and space (tense), aspect (ZAHO), modal tags (BAI), negation, questions, commands, relative clauses, identity (me/du), internal links (be), numbers, quotations, connectives, pronouns, and attitudinals... **.i pei**—how are you feeling about it all now?



la .soran.

.ui—To be honest, it's been a ride! I love that there's no messy inflection to worry about, and in some ways, the logical structure feels even simpler than English once you get the hang of it.

...Doorbell...



la .sevan.

coi .kocon. ...Oh, hey Sora! I didn't expect to see you here. mi'e .sevan. .i mi citno mensi la .soran.



la .soran.

Sevan! You're only showing up now? We're already finished!



la .kocon.

ki'e .sevan.—Thanks for bringing that over. Now that we're all here, we can officially bring this edition of *First Lojban* to a close.



la .sevan.

je'e do. (No problem!)



la .kocon.

But wait! There's one last thing—a little pop quiz to see how much you've really learned. Grab a pen and some paper! The exam is here, and once you're done, check your answers against the answer key.



la .soran.

I got an 81! That's a solid A in my book!



la .kocon.

Nicely done! You've officially completed the *basic track*.



la .kocon.

If you're still hungry for more, there's also the "Back Alley"—two extra "dungeon" chapters (Lesson 27, Lesson 28) for those who want a little more logic-flavored fun. But for everyone else, it's **co'o** for now!



la .sevan.

co'o

Lesson 27. (Extra) Propositions, properties, relations



la .kocon.

Welcome to the "Back Alley"! This is a little philosophy and logic gym tucked away next to the main Lojban course. It's totally optional, but it's a lot of fun if you like to think about how language and thought fit together.

Propositions

Sentences in different languages can often *mean exactly the same thing*, even if they use completely different words ("I am a human," **.i mi remna**, *Mi estas homo*, etc.). We call that shared underlying meaning a *proposition*. In Lojban, any declarative sentence that expresses this meaning is a *propositional sentence*.

The word **du'u** is used to wrap a whole sentence into a single item: "*the proposition that [sentence] is true.*"

du'u [sentence]:

The proposition expressed by the given [sentence]. (x_1 is the proposition, x_2 is its textual representation).

Philosophers like to argue about what a proposition "actually" is—is it an idea, a set of possible worlds, or a disposition to behave in a certain way? For our purposes in Lojban, you can just think of it as the "*logical content of a declarative sentence.*"

ce'u — open place in a property

Wait, **ce'u remna** isn't a complete sentence by itself. It's more like a *property* ("to be human"), with a "blank space" or "slot" marked by the word **ce'u**. (Most introductory texts and the CLL discuss how this connects to **ka** abstractions—check those out if you want to dive deeper!)

Exercises

- Try building a **du'u**-sentence that pairs the same proposition across two different languages using those **zoi** quotation markers we learned in Lesson 22.

- ⚙️ How would you say "the English version of the proposition is identical to the Japanese version" using our identity word **du** (from Lesson 15)?

Relatives refresh

ti noi ke'a remna ku'o cu melbi

"This thing—which, as it happens, is human—is beautiful."

Try connecting these abstract *properties* to what you've learned about **poi** and **noi** relative clauses.

Lesson 28. (Extra) Existence and quantifiers



la .kocon.

When we make *existential claims* (saying that something exists), the truth of what we say depends entirely on our *domain of discourse*. For example, saying "there are two yellow things" might be true if we're only talking about a specific picture or a scene in a movie, but it would be false if we were talking about everything in the entire universe. Whenever you see a quantifier, always ask yourself: *What is the frame we're counting within?*

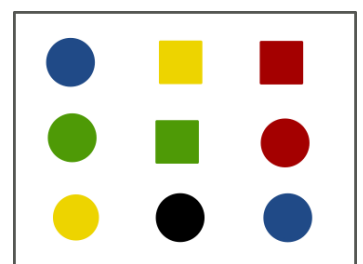


la .soran.

Ah, I see. So "a bird exists" usually just means "there's a bird in our line of sight," not necessarily that a bird exists in every possible corner of the cosmos.

Picture: one domain of discourse

Here is a concrete diagram: colored circles and squares drawn inside a frame. Existential sentences are judged within that frame unless you widen the domain (for example to "the whole world").



A finite domain

Practice reading existentials against a single boxed universe of objects.

Quantifier prefix + zo'u

Here's the logic-flavored template for building these sentences:

[Quantifiers + Variables] **zo'u** [The Sentence using those variables]

da, de, di ≈ ‘The variables (the things we're talking about). If you don't give an explicit number, they default to "at least one.”

zo'u ≈ ‘The marker that separates the "inventory list" (the prenex) from the actual sentence.’

su'o pa da zo'u da cukla

There is at least one thing such that it is round. (Something is round.)

re da zo'u da pelxu

There are exactly two things such that they are yellow. (Two things are yellow.)

One very important rule: *the order of variables in the list matters!* Saying "there is some X and then some Y" isn't always the same as saying it the other way around.

In many simple cases, you can actually *fold* that list of variables directly into the sentence itself—though we'll stick to the explicit version for now.

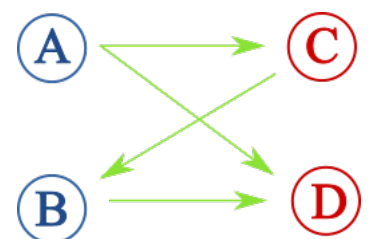
Think of it like this: the variables you introduce at the start "bind" to the words in the sentence that follows. Reordering them can change their "scope," which changes the entire meaning. For example, "for every person, there's a favorite hat" is a very different claim than "there's a single favorite hat that belongs to everyone." Formal logic is a deep topic, but for now, just remember: *order matters*, and the *domain of discourse* determines what "exists."

Figures: exhausting a small domain

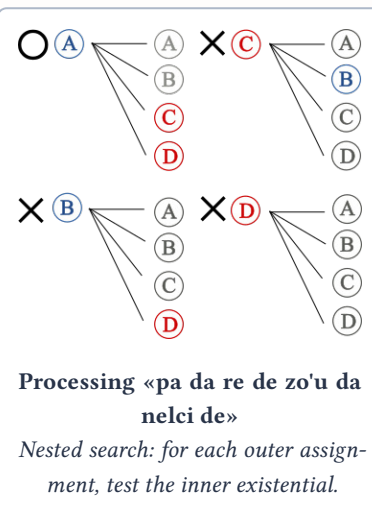
When only finitely many objects are in play, you can test existential claims by *case analysis*—plug each candidate in and count how many satisfy the inner property. The original lesson walked through grids like these (including a toy “who likes whom” relation) to show why the order of quantifiers in the prenex matters.



Checking «re da zo'u da nanmu»
 Grid-style check: how many referents satisfy “is a man” inside the domain.



A toy “likes” map
 Four people with arrows for likes—used to evaluate nested quantifiers.



la .kocon.

Since we're just scratching the surface here, I highly recommend checking out the quantifier chapters in the *CLL* for full tables and more formal exercises. This little "Back Alley" is only here to point you toward the machinery!

Lesson 29. Letter words: lerfu, bu, and boi



la .soran.

Wait – there's *more*?



la .sevan.

Hey, think of it as New Game Plus. You've cleared the main story; now we get into the hidden rooms. First topic: *letter words*.

What is a lerfu?



la .sevan.

You already know that Lojban uses Latin letters. Back in Lesson 2, you learned how to *name* them:

- ⚙️ **Consonant letter names:** [consonant] + y + . → **by.**, **cy.**, **sy.**, **zy.** ...
- ⚙️ **Vowel letter names:** . + [vowel] + bu → **.abu**, **.ebu**, **.ibu**, **.obu**, **.ubu**

A word used as a letter name is called a **lerfu** (letter/symbol word).

lerfu ≈ 'x₁ is a letter/symbol representing x₂ in alphabet/writing system x₃'



la .soran.

So **by.** is the Lojban name for the letter "b" and **.abu** is the name for "a". Got it. But I never heard about the period **.** or apostrophe **'**. What are those called?



la .sevan.

Good catch. They're special:

- ⚙️ **Period .** → **denpa bu** ("pause-letter")
- ⚙️ **Apostrophe '.** → **.y'y.** (literally the cmavo **.y.** spoken as a lerfu – two glottal pauses around the schwa)

denpa ≈ 'x₁ waits for x₂ (event) while doing x₃, until x₄ begins'



la .soran.

So **denpa bu** is literally the "waiting letter." A pause. That's kind of poetic.



la .sevan.

Also works for letters Lojban doesn't normally use, like **h**, **q**, or **w**. Since **'** already sounds like an "h", people often write **h** as **.y'y. bu** ("an h-like letter"). And **q** is typically **.ky. bu** ("a k-like letter"), since **q** in most languages sounds like **k**.

bu: turn any word into a letter-symbol



la .sevan.

The real power tool here is **bu**. Stick **bu** after *almost* any Lojban word, and it becomes a lerfu – a symbol standing for that word.

Common examples you'll see in practice:

.ui bu → 😊 (the happiness-letter)

.iu bu → ❤️ (the love-letter)

denpa bu → . (the pause-letter)



la .soran.

So **.ui bu** is literally the emoji :)? That's delightful. Can I put **bu** after *any* Lojban word?



la .sevan.

Almost. A few words eat up whatever comes right after them before **bu** gets a chance to act:

⚙️ **zo, zoi, la'o, lo'u** — all of these grab the *next word* or *next passage* as a quotation before **bu** can form a lerfu.

So **zo bu** doesn't make a "zo-letter"; it quotes the word **bu** itself.



la .soran.

Edge case, sure. I'll remember: quotation words come first.

A string of lerfu = one sumti



la .sevan.

Here's something subtle. Consider this sentence:

.abu dunda by. cy.

A gives bc.



la .soran.

Wait — "a gives bc"? Not "a gives b to c"?



la .sevan.

Exactly. **by. cy.** is a *sequence* of lerfu and sequences are treated as a single sumti — the string "bc". So the sentence has only *two* arguments: the giver (a) and the thing given (bc).

Word spacing doesn't matter: **by.cy.** and **by. cy.** both mean the letter string "bc".



la .soran.

So how do I say "a gives b to c"?



la .sevan.

Use **boi** to explicitly end the lerfu (or number) sequence:

boi ≈ 'terminator for lerfu strings and number sequences'

.abu dunda by. boi cy.

a gives b to c.



la .soran.

boi cuts the lerfu string at that point. So **cy.** stays separate, filling x_3 of **dunda** as the recipient. Okay, I'll remember that one.



la .sevan.

boi works with numbers too. If you ever see something like **li pa by.** (the number 1 followed by the letter b), writing **li pa boi by.** keeps them from fusing into a hybrid string.

Acronym name words



la .sevan.

Last topic: how to Lojbanize acronyms like NASA, FBI, CD, or BPFK.

The official recipe:

1. Spell out each letter with its Lojban lerfu name.
2. If two vowel-name lerfu come next to each other, insert an apostrophe between them.
3. Add any consonant at the very end (the last consonant lerfu already in the string is convenient, or use **n**, or use the first letter of the source culture's word for the organisation).

la .ny'abusy'abus. → NASA

la .cydyd. → CD

la .fyby'ibun. → FBI

la .bypyfykyk. → BPFK



la .soran.

So every letter is just spelled out in Lojban order, smooshed together, with a final consonant tacked on?



la .sevan.

Exactly. The last consonant makes it a proper cmevla (remember: name words must end in a consonant). As long as it's intelligible, you have some flexibility — some people drop all the **bu** parts and just use the Lojban letter names directly, others invent shortcuts. *Communicability* is the real rule.



la .soran.

Huh. So Lojban texters probably have their own abbreviation styles by now.



la .sevan.

Almost certainly. The language *grows* with its speakers.

Lesson 30. Advanced name words: stress and forbidden clusters



la .soran.

You know what bugged me about Lesson 3? Koshon said cmevla *can* have stress somewhere other than the second-to-last syllable, and then Sora just yelled "let's ignore that!" and we moved on.



la .sevan.

Classic Sora. Okay, let's fix it. This lesson is about two things: marking non-default stress, and the consonant clusters that are *never* allowed anywhere in Lojban.

Non-default stress in cmevla



la .sevan.

You know the default: stress the second-to-last syllable, ignoring **y**.

But names from other languages don't always fit that pattern. Lojban lets you override it: capitalize the letters of the stressed syllable.

la .akasakas. → akaSAkas (stress falls naturally on second-to-last: -sa-)

la .aKAsakas. → AKAsakas (stress on the first syllable, marked explicitly)

la .iaTSUxacin. → iaTSUxacin (八つ橋 — stress on the second syllable)



la .soran.

Just capitalize the whole stressed syllable?



la .sevan.

Technically it's enough to capitalize just the vowel, but capitalizing the whole syllable is easier to read. Either way is valid.

Some writers also use diacritical marks — like **la .akásakas.** — but that's non-ASCII and not everyone can type it. Capitals work everywhere.



la .soran.

So the two forms **la .akasakas.** and **la .aKAsakas.** represent the same name with different stress placements, not two different words.



la .sevan.

Exactly. It's an accent record, not a spelling distinction.

One practical point: whether to preserve the original accent is up to personal taste. Some people think Lojbanization *should* change the accent (it's part of adapting the word). Others want to keep the original as close as possible. Both views are reasonable.

Forbidden consonant clusters



la .sevan.

Now the important list. Lojban avoids certain sound combinations — usually because they're easy to mishear or because they don't fit the word-boundary system. Here are the key forbidden patterns:

Never allowed in Lojban (at word junctions or within a word):

1. *Double consonants* — kk, dd, pp, ss ... any consonant repeated back-to-back.
2. *Mixed voice in obstruents* — e.g. pv, gs, td, gk ... pairing a voiced obstruent (b d g v z j) with an unvoiced one (p t k f s c x). (**r l m n** are not obstruents and can mix freely.)
3. *The sibilant cluster* — cs, sc, jz, zj — these sounds are too similar and blend together.
4. *Specific forbidden pairs*: cx, kx, xc, xk, mz
5. *Specific forbidden triples*: ndj, ndz, ntc, nts



la .soran.

That's a lot. Do I have to memorise all of those to make a cmevla?



la .sevan.

For everyday Lojbanization you mostly need rules 1 and 2 — they cover the vast majority of cases. The others are rarer. And the fix is always the same: insert a y between the two problem consonants.

Problem: **London** → nd is allowed, but the final n would give us **.londyn**. — wait, that's fine actually.

Problem: **Marx** → rx is fine. But **Marx + s** at the end: **.markss**. — double-s! Fix: **.markyss**. or simply **.marks**.



la .soran.

So **y** is the universal lubricant between stuck consonants.



la .sevan.

Exactly. And two more vowel rules to watch when making name words:

Vowel rules in cmevla:

- ⚙️ **i** and **u** become semivowels (**y**-glide and **w**-glide) when they appear *after a consonant* and before another vowel. To avoid this if you don't want it, double the vowel: **giia** for ぎゃ, **niio** for によ.
- ⚙️ Any two non-**i/u** vowels in a row need an apostrophe between them: **o'u**, **e'a**, etc.



la .soran.

So "Tokyo" (東京 = Toukyou) would be **.tokiion.** to avoid the **kyo** glide becoming a semivowel?



la .sevan.

Yep, or **.tokion.** if you're fine with the kyo-glide. Either is defensible. The point is that the parser can still tell the words apart.

Try a few yourself:

Exercise



la .sevan.

Lojbanize the following names. Remember: the word must end in a consonant, no forbidden clusters, apostrophes between non-**i/u** vowel pairs.

1. *Kyoto* (京都 – Kyouto)
2. *Miku* (ミク)
3. *Zhang* (张 – the Chinese surname, approximately "Djang")



la .soran.

Okay:

1. **.kiioton.** – kio would make ki a semivowel before o, so I doubled the i. Or just **.ki-ioton.** / **.kioton.** if I'm okay with the glide.
2. **.mikun.** or just **.mik.** – straightforward.
3. **.djans.** or **.djang.** wait, final ng → I need a consonant... **.djangn.** – hmm, gn is allowed (voiced+nasal). Actually just **.djans.** or **.djan.** is fine too.



la .sevan.

All reasonable. Option variety is a feature, not a bug. The community will converge on popular forms for well-known names.

Lesson 31. Sound equals text — Lojban's audio-visual design



la .soran.

So wait — Sevan showed me earlier that you can type `.o'imuXAGjisofyBAKnicuZVAtilePURdi` (all one string, no spaces) and a Lojban parser can *still* tell what every word is?



la .sevan.

Yes. That's not a trick — it's a core design property called *audio-visual isomorphism* (AVi for short).



la .soran.

Iso-what-now?



la .sevan.

"Isomorphism" means "same shape." The idea is:

- ⚙️ Any properly spoken Lojban utterance can be uniquely written down.
- ⚙️ Any properly written Lojban text can be uniquely read aloud.

This is stricter than most languages. In Japanese, for example, a string of hiragana like `くるま
でまとう` could parse as "waiting by car" or "waiting until [he] comes" — the boundary between words is ambiguous. Lojban forbids that.

How word shapes make boundaries unambiguous



la .sevan.

Recall the three word types (Lesson 3):

- ⚙️ **brivla** — has a consonant cluster in the first five letters, ends in a vowel.
- ⚙️ **cmavo** — no internal consonants except possibly the very first, ends in a vowel.
- ⚙️ **cmevla** — ends in a consonant.

These shapes were engineered so that once you read a stream of sounds (including where the stress falls), there is *exactly one way* to cut it into words. Every word boundary is recoverable from the sound alone.



la .soran.

That's why you can ditch spaces if you include stress marking?



la .sevan.

Exactly. Spaces are a courtesy to the reader, not a grammatical necessity. Lojban's design makes them optional – as long as stress is explicit, the string is still unambiguous.

(That said: please use spaces when writing to humans. Reserve the spaceless form for puzzles and Twitter character limits.)

Why dots exist



la .sevan.

Now you can fully understand why certain dots are required:

1. **Before vowel-initial words** – **.i**, **.abu**, **.iu**, etc. Without the dot, a preceding final vowel might run into the opening vowel and create ambiguity about where one word ends and the next begins.
2. **After words ending in y** – **.y** is a cmavo; the trailing dot keeps it from being read as the start of the next word.
3. **Around cmevla** – **la .soran.** has a dot at each end, clearly marking the name as a single unit separate from surrounding words.

All three rules are there for the same reason: *to keep word boundaries clear*.



la .soran.

So "omajinaï" (Koshon's word for the dots back in Lesson 2) was actually "word boundary markers"!



la .sevan.

Right. Koshon skipped the explanation to keep Lesson 2 simple. Now you know.

The bigger picture



la .sevan.

This design has a few practical consequences:

What AVi enables:

- ⚙️ *Parsers work cleanly.* Because word boundaries are always recoverable, programs like *ilmentufa* (the camxes parser) can parse Lojban text exactly as a speaker would hear it.
- ⚙️ *Lojban creates new words carefully.* Every new gismu and lujvo has to pass morphological checks – forbidden clusters, uniqueness, etc. – precisely to preserve this property.
- ⚙️ *Spoken Lojban matches written Lojban.* There is no difference between "formal written" and "informal spoken" grammar the way there is in many natural languages.



la .soran.

So the word-shape rules I grumbled about learning aren't arbitrary – they're load-bearing architecture.



la .sevan.

Exactly. Lojban is less like a collection of rules-for-rules'-sake and more like an engineered system where each constraint earns its keep. Take out one rule and something else breaks.



la .soran.

That's actually... kind of cool? It's more like a proof than a language.



la .sevan.

Some people say exactly that. Whether that's a feature or a bug is left as an exercise for the learner.

Lesson 32. Selma'o – cmavo subcategories



la .soran.

So far I've been collecting cmavo like pocket lint: **lo, le, nu, be, poi, noi, cu, ko'a, fa, se** ... they're everywhere. Is there any system?



la .sevan.

Yes! Each cmavo belongs to a **selma'o** – a syntactic subcategory. Words in the same selma'o behave identically in terms of grammar: you can swap them out without causing a parse error (though the meaning changes, of course).



la .soran.

And what's the selma'o *called*?



la .sevan.

Each selma'o is named after one of its representative members, written in capitals. For example:

- ⚙ The article class (the "sumti-former" cmavo like **lo, le, la** ...) is called **LE**.
- ⚙ The tense class (time-distance markers like **zi, za, zu** ...) is called **ZI**.
- ⚙ The abstractors like **nu, du'u, ka** ... are the **NU** class.
- ⚙ The selbri negation cmavo **na, ja'a** are the **NA** class.

You've actually already been using these names! **SE** for se/te/ve/xe, **FA** for fa/fe/fi/fo/fu, **COI** for coi/co'o/ki'e...



la .soran.

Oh – that's why Koshon kept saying "SE class" and "FA class." They were just giving me the selma'o names all along!



la .sevan.

Exactly. The names aren't invented arbitrarily – they're always the simplest or most common member of the class, upcased. You can find them in any Lojban dictionary next to each cmavo entry.

Swapping within a selma'o



la .sevan.

Within a selma'o, any member can replace any other and the sentence will stay grammatical. Only the meaning differs:

lo mlatu — some cats (in reality)

le mlatu — the cat(s) I have in mind

la .soran. — (the entity named Sora)



la .soran.

All three are in **LE** selma'o, so they all "work" in the same grammatical slot — just with different references.



la .sevan.

Right. Same slot, different meaning. That's exactly what selma'o tracks.

One caution: "article" in the English-grammar sense doesn't map perfectly onto any single selma'o. What English calls articles spans multiple Lojban classes. Selma'o is strictly about *syntactic behavior*, not English grammatical terms.

Sub-numbering within a selma'o



la .sevan.

Some selma'o are large enough to sub-divide by meaning. The convention is to append a number to the selma'o name:

- ⚙️ **KOhA1** — personal pronouns: **mi, do, mi'o, mi'a** ...
- ⚙️ **KOhA2** — demonstratives: **ti, ta, tu**
- ⚙️ **KOhA3** — reflexive/anaphoric: **ri, ra, ru, ko'a, fo'a** ...

All of these are still **KOhA** (same grammar), but the sub-number tells you *which semantic cluster* they belong to.



la .soran.

So the big picture is: selma'o tells you the grammar, the number tells you the meaning flavour.



la .sevan.

Nicely put. And if you ever want to really map out Lojban's grammar systematically, going through the major selma'o one by one is a great approach. It also helps you notice when you're missing vocabulary — you might know the NU abstractors **nu** and **du'u** but realize you've never seen **si'o** or **ni**.

Quick selma'o tour of things you already know

Selma'o	Examples	Role
LE	lo, le, la	sumti-formers (articles)
NU	nu, du'u, ka, ni	abstractors
FA	fa, fe, fi, fo, fu	place tags
SE	se, te, ve, xe	place converters
ZI	zi, za, zu	tense distance
PU	pu, ca, ba	tense direction
COI	coi, co'o, ki'e	vocatives
NA	na, ja'a	bridi negation / affirmation
UI	.ui, .oi, .ua, .a'o ...	attitudinals
KU	ku, kei, ku'o, lo'o ...	terminators



la .soran.

I know all of those! I just didn't know they had names.



la .sevan.

Now you do. And whenever you encounter a new cmavo in the wild, your dictionary will tell you its selma'o — which instantly tells you *how* to use it, even before you know what it means.

Lesson 33. What predicates really mean — and zo'u as a topic marker



la .soran.

Can I ask something I've been wondering about for a while? Those " x_1 loves x_2 " definitions — they're in English. But Lojban isn't English. How do I know the English gloss captures the real meaning?



la .sevan.

You don't. Not completely. And that's worth talking about.

The limits of "hole-filling" definitions



la .sevan.

When you look up a brivla, you see something like:

prami \approx 'x₁ loves x₂'

That "x₁ loves x₂" is a *translation* — a Japanese, English, or Russian window into a Lojban concept. Every translation carries the source language's baggage:

- ⚙️ English "loves" has tense built in (present tense default); Lojban **prami** doesn't care about tense.
- ⚙️ English separates "love" from "like" culturally; Lojban speakers use **prami** more broadly.
- ⚙️ English "love" is a verb — implying a doer and a receiver in a specific power arrangement; Lojban relations are more neutral.



la .soran.

So the definition is a *hint*, not a theorem.



la .sevan.

Right. The real meaning of a brivla is the *relation* it names — a pattern in the world — not the English words used to describe it. When you internalize a brivla, you eventually stop translating and just know the shape of what it connects.

Think of it this way: **citka** names the "eating" relation. Whether that's "eating", "consume", "to eat", "eats" doesn't matter. The relation connects eater and food. *That's* the concept.



la .soran.

So "minimum description, maximum interpretation" applies to the definitions themselves too, not just the sentences.



la .sevan.

Exactly. The place structure tells you *what kinds of things are involved*, not exactly how to translate every nuance into your native language.

Place structure: why those slots?



la .sevan.

Each brivla has its slots because *that kind of situation usually involves those participants*. A "buying" relation (**pleji**, **vecnu**) typically involves a buyer, a seller, a thing sold, and a price — so those are the places. A "waiting" relation (**denpa**) involves a waiter, an event waited for, a state while waiting, and a trigger — so those are its places.

Less-central participants don't get core slots — they get tags (**ba**, **fi'o**, etc.). The design choice is: put the *most essential* participants in the numbered slots, leave the rest for tags.



la .soran.

And you never have to fill every slot. You say what you mean and let context fill the rest.



la .sevan.

Lojban's motto, really: *minimum necessary statement, maximum interpretive latitude*. Don't say more than you mean.

zo'u — more than a prenex marker



la .sevan.

Back in Lesson 28, you used **zo'u** to write the prenex of an existential statement. But **zo'u** has a second job: it's a **topic marker**.



la .soran.

Topic as in... what the sentence is *about*?



la .sevan.

Yes. In most languages, topics and grammatical subjects often coincide, but they're different things. The grammatical x_1 slot in Lojban is whoever fills the first place of the predicate — that might not be what the speaker considers the "topic."

Anything placed before **zo'u** (any sumti, with or without tags) is marked as the topic of the following sentence.

lo xanto zo'u lo nazbi cu clani

As for elephants, the nose is long. (Topic: elephants. Subject: the nose.)

ca lo bavlamdei zo'u mi cliva ti

Tomorrow, I'm leaving here. (Topic: tomorrow. Subject: I.)

xanto \approx 'x₁ is an elephant/proboscid of species x₂'

nazbi \approx 'x₁ is the nose of body x₂, nasal passage x₃'

clani \approx 'x₁ is long in dimension x₂, by standard x₃'



la .soran.

So the elephant sentence – x₁ of **clani** is the *nose*, not the elephant, but the elephant is what we're talking about. The topic sits before **zo'u**, and then the normal predication follows.



la .sevan.

Exactly. Compare the same content without explicit topic:

lo nazbi be lo xanto cu clani

The nose of an elephant is long.



la .sevan.

Grammatically equivalent claim, but the topic/emphasis is different. The **zo'u** version says: "Here's what we're talking about (elephants), and here's what I'm saying about it (the nose is long)."

In practice, modern Lojban speakers often omit explicit topics and let context carry the weight. But **zo'u** is there whenever you want to be precise about what the sentence is *about*, independently of what fills x₁.



la .soran.

So **zo'u** is doing double duty: prenex-separator in Lesson 28, topic-marker here. Same word.



la .sevan.

Same word, same mechanism — you're always separating a "preamble" from the "main claim." In the prenex case, the preamble introduces quantified variables. In the topic case, it introduces what we're discussing. Both are just different kinds of "setup before the sentence proper."

Lesson 34. Tanru brackets: bo, ke ... ke'e, and co



la .kocon.

Long time no see! Sevan asked me to guest-lecture on tanru grouping.



la .sevan.

Koshon knows this better than I do. Also, Sora listens to Koshon.



la .soran.

I do *not*... okay maybe a little.



la .kocon.

Recall from Lesson 6: tanru group left to right by default.

blabi mlatu zdani = ((blabi mlatu) zdani)

That means "a white-cat house" — the house is cat-like (white-cat-type house). *Not* "a white (cat-house)" (a house for white cats).



la .soran.

Right, and we got burned by that once. So how do we change the grouping?



la .kocon.

Three tools: **bo**, **ke/ke'e**, and **co**.

bo – raise binding priority



la .kocon.

bo placed *between* two selbri binds them tighter than the default. Think of it as the multiplication sign in arithmetic: $2 + 3 \times 4$ evaluates differently from $(2 + 3) \times 4$, and **bo** is the \times sign.

bo \approx 'Makes the two selbri on either side bind before anything else.'

blabi mlatu bo zdani

= blabi (mlatu **bo** zdani)

= blabi (mlatu-zdani)

A *white cat-house*. – the house is white; it's a cat-house kind of thing.

blabi bo mlatu zdani

= (blabi **bo** mlatu) zdani

= (blabi-mlatu) zdani

A *white-cat house*. – same as the default, emphasized.



la .soran.

Oh! So **blabi mlatu bo zdani** finally puts the house in charge of being white, not the cat.



la .kocon.

Exactly. **bo** is the quick way to say "glue these two together first."

ke ... ke'e – explicit parentheses



la .kocon.

If **bo** is the × sign, **ke ... ke'e** are actual parentheses. Everything between them is treated as one unit before any surrounding selbri are considered.

ke ≈ 'Open grouping bracket for tanru.'

ke'e ≈ 'Close grouping bracket (terminator for ke).'

blabi ke mlatu zdani ke'e

= blabi (mlatu zdani)

A white cat-house. (Same meaning as the **bo** example above.)



la .soran.

When would I use **ke** instead of **bo**?



la .kocon.

When grouping more than two pieces. Watch:

xekri ke melbi kerfa ke'e ke cinla birka ke'e bo ninmu

= xekri (melbi kerfa) (cinla birka) **bo** ninmu

A woman with black beautiful-hair and slender arms.

Structure: ((xekri (melbi kerfa)) ((cinla birka) ninmu))

kerfa ≈ ' x_1 is the hair/fur of body x_2 at location x_3 '

cinla ≈ ' x_1 is thin/slender in dimension x_2 , by standard x_3 '

birka ≈ ' x_1 is an arm of body x_2 '



la .soran.

So **ke'e** is the right terminator for **ke**. Not **ku** or anything else.



la .kocon.

Right. And **ke'e** is often *optional* in practice – if it's at the very end of the tanru before a sumti, the parser can figure it out. But when you're nesting multiple brackets, explicit **ke'e** is much safer.

co – flip the modification direction



la .kocon.

co is the trickiest of the three. It does two things together:

1. Makes everything to its left the *modifier* (lower priority).
2. Makes everything to its right the *head* (the modified selbri).

In other words: **co** reverses the usual left-modifies-right pattern.

co ≈ 'Inverts tanru modification direction; what follows **co** is the head.'

zdani co blabi → *a white house* (zdani is now the thing being described; blabi is the modifier)

bunre mlatu co nimre jisra nelci → *an orange-juice-liking brown cat*

nimre ≈ ' x_1 is a citrus/mandarin of species x_2 '

jisra ≈ ' x_1 is juice/liquid from x_2 '



la .soran.

Why would you ever want to reverse the direction? That sounds confusing.



la .kocon.

It becomes useful when you want to attach a long modifier *phrase* (one that includes **be/bei** sumti slots) to a simpler head. Without **co**, that gets unwieldy:

Without **co** (verbose):

tu klama be la .latcmatcad. bei le cmana ke ladru nelci ke blabi mlatu

With **co** (clean):

tu ladru nelci ke blabi mlatu co klama be la .latcmatcad. bei le cmana

That thing is a milk-loving white-cat that goes from the mountain to Latcmatcad.



la .soran.

Oh – **co** lets you keep the main concept (klama – "goes") on the right where it's easy to read, and pile the modifiers to the left of **co**. The arguments after **co** then belong to **klama**, not to the stuff on the left.



la .kocon.

That's the third feature of **co**: the sumti following **co**'s right-side selbri fill *that* selbri's places, not the overall tanru's. It's a convenience for readable tanru with embedded sumti.

Tanru poetry challenge



la .kocon.

Now for something fun. Write a short poem using *only selbri* – no sumti, no tags. Just predicates strung together with **.i** between them. You can use **bo**, **ke**, and **co** to shape your tanru. The brevity forces you to let the predicates carry everything.



la .sevan.

Koshon calls this *tanru pemci* – predicate poetry.

pemci \approx 'x₁ is a poem with property x₂, by author x₃, for audience x₄'



la .kocon.

Here's an example:

.i xendo solri bo gusni canci
.i nichte manku klama
.i cladu cliva
.i smaji

(loose translation: *The gentle sunlight fades. Night-darkness comes. Loudness departs. Silence.*)

xendo ≈ 'x₁ is kind/gentle to x₂'

solri ≈ 'x₁ is the sun/star of planet x₂'

gusni ≈ 'x₁ is light illuminating x₂ from source x₃'

canci ≈ 'x₁ disappears from x₂ (place/view)'

cladu ≈ 'x₁ is loud/noisy to observer x₂, by standard x₃'

smaji ≈ 'x₁ is quiet/silent to observer x₂, by standard x₃'



la .soran.

No nouns, no pronouns, no time words — just pure predicates. And it *works*. Because Lojban predicates already contain the "is" and "does" without needing extra words.



la .kocon.

Tense is optional. Number is optional. Subject is optional. Tanru is ambiguous by design. All of that ambiguity becomes *atmosphere* in poetry.



la .soran.

Okay I'll try one:

.i barda mlatu
.i cmalu mlatu
.i mutce melbi
.i gleki munje

(*Big cat. Small cat. Very beautiful. Happy world.*)



la .kocon.

I love it.



la .sevan.

...I also love it, but I'm not going to say so.