Constructed Language Project Check-In #1

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1. Phonemic Inventory

IPA Consonant Chart

	Bilabial		Labiodental		Alveolar		Retroflex		Palatal		Velar	
Plosive					t	d					k	g
Nasal				ɱ						ɲ		
Non-sibilant Fricative	ɸ	β					ʂ	ʐ				
Approximant		β̞						ɻ		j		
Trill		ʙ										

Symbols to the right in a cell are voiced, to the left are voiceless.

IPA Vowel Chart

	Front	Central	Back
High	ɪ		ʊ
Mid			
Low	æ		ʌ

Why Sounds Were Chosen
- I primarily chose sounds that I thought sounded interesting that I knew I could pronounce (a prime example being the voiced bilabial trill).
- I wanted to choose distinctive sounds to allow for written words to be spelt more phonetically compared to English.
- For vowels, I wanted to choose a limited selection of sounds that were distinctive from each other so I made sure they came from the four different corners of the IPA chart.

Adherence to Universal Principles
- Highlighted green are principles I have followed, highlighted red are principles I have not followed
- Phonemic Inventory:
  - Every language has at least one rounded vowel. If there is only one rounded vowel it should be a back vowel
    - I'm using **/ʊ/** which is rounded and a back vowel
  - Every language has at least one back vowel
    - **/ʊ/** and **/ʌ/** are my back vowels.
  - A language must have more consonants than vowels.
    - There are 14 consonants and 4 vowels.
  - A language must have at least three vowels.
    - This language has four vowels.

- o If a sound has a voiced stop, it must have its voiceless stop counterpart.
  - ▪ My voiced alveolar plosive **/d/** has **/ t/** and my voiced velar plosive **/g/** has **/k/**.
- o If a sound has a voiceless fricative, it must have its voiceless stop counterpart.
  - ▪ The voiceless fricative **/ɸ/** does not have its voiceless stop counterpart **/p/**.
  - ▪ The voiceless fricative **/ʂ/** does not have its voiceless stop counterpart **/ʈ/**.
- o All languages have voiceless consonants.
  - ▪ **/ɸ/** and **/ʂ/** are my voiceless consonants
- o All languages have at least one nasal consonant.
  - ▪ **/ɱ/** and **/ɲ/** are my nasal consonants
- o All languages have coronal sounds (dental-palatal region)
  - ▪ Alveolar consonants: **/t/**, **/d/**.
  - ▪ Retroflex consonants: **/ʂ/**, **/ʐ/**, **/ɻ/**.
  - ▪ Palatal consonants: **/ɲ/**, **/j/**.
- **Syllables:**
  - o All languages have CV syllables.
    - ▪ CV syllables are permissible
  - o When a consonant can appear in an onset and a coda, it will choose to be in the onset (unless phonotactics disallows it).
    - ▪ See syllable section below for example.
  - o Syllable Chains (CCCV → CCV → CV) (VCCC → VCC → VC → V / CVC / CV)
    - ▪ the syllable chains **CCV → CV** and **VC → V / CVC / CV** are present
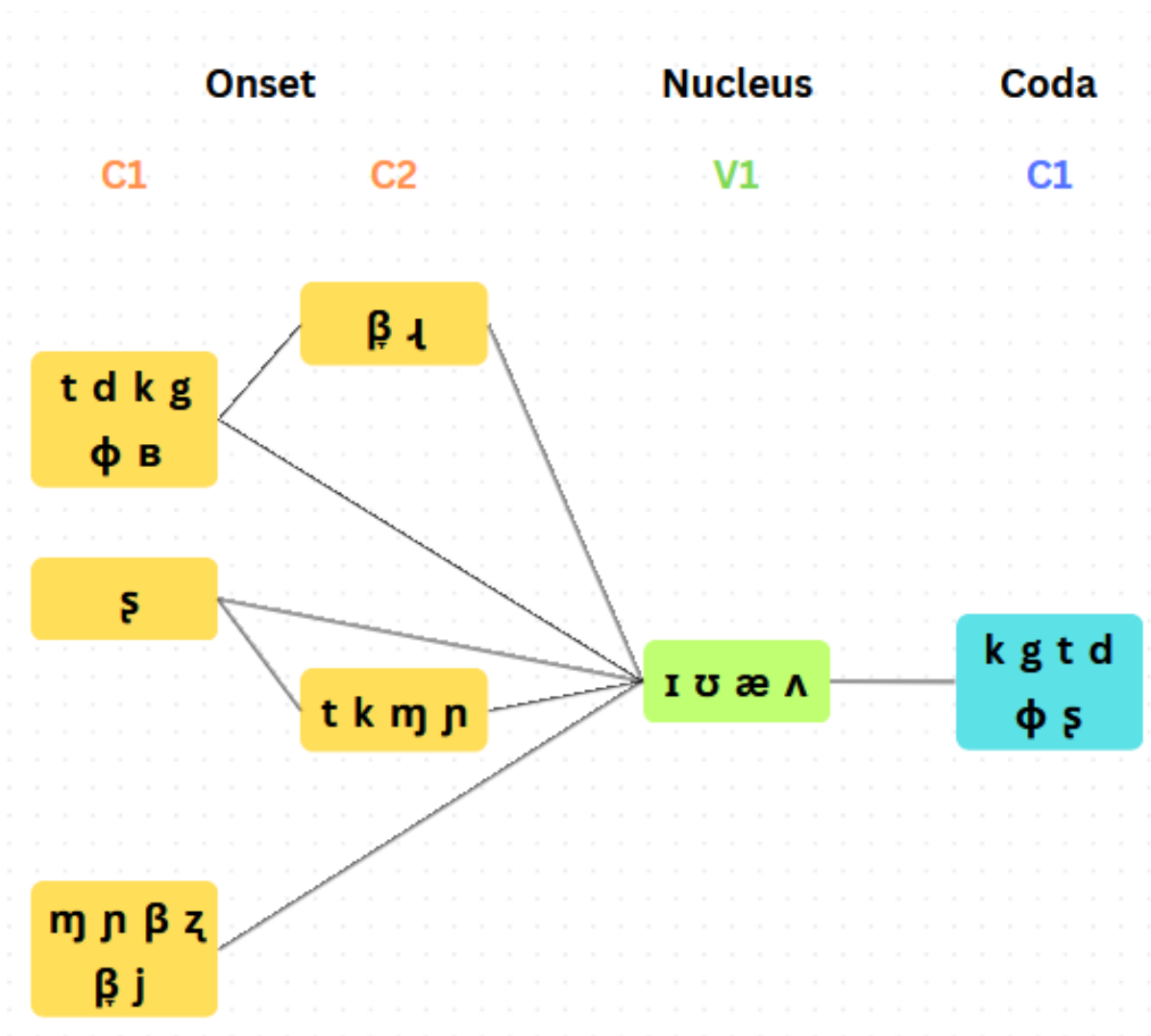
2. Phonotactics

List of Permissible Syllables (Diagram below)
- V, VC, CV CCV, CCVC
- or: (C)(C)V(C)

- Only the following consonant clusters can start syllables (onset):
  - o All consonants allowed in first consonant of onset except **/ɻ /**
  - o Plosives can be proceeded by a approximant other than **/j/:**
    - ▪ **tβ̞, tɻ**
    - ▪ **dβ̞, dɻ**
    - ▪ **kβ̞, kɻ**
    - ▪ **gβ̞, gɻ**
  - o **/ʙ/** can be proceeded by a approximant other than **/j/:**
    - ▪ **ʙβ̞, ʙɻ**
  - o **/ɸ/** can be proceeded by a approximant other than **/j/:**
    - ▪ **ɸβ̞, ɸɻ**
  - o **/ʂ/** can be proceeded by a voiceless plosive:
    - ▪ **ʂt, ʂk**
  - o **/ʂ/** can fricative can be proceeded by a voiced nasal:
    - ▪ **ʂɱ, ʂɲ**

- Only the following consonants can end a syllable (coda):
  - A plosive:
    - **k, g, t, d,**
  - A voiceless fricative
    - **ɸ, ʂ**
- Proper nouns, along with technical, international, or culture-specific words, are free to break these rules

Diagram Version

Onset		Nucleus	Coda
C1	C2	V1	C1

t d k g
ɸ β

β ɭ

ʂ

t k ŋ ɲ

ŋ ɲ β ʐ
β̝ j

ɪ ʊ æ ʌ

k g t d
ɸ ʂ

Examples of Good / Bad Syllables

Good Syllables	Why?	Bad Syllables	Why?
ɪ	V syllable which follows permissible syllables.	ɪʌ	There are no permissible double vowel usage.
ʊg	VC syllable which follows permissible syllables.	ʊgt	Double consonant coda is not allowed.
ɸæt	CVC syllable which follows permissible syllables.	ɭæɭ	No syllable can start with or end with **/ɭ/**
ʂkʌ	CCV syllable which follows permissible syllables.	dkʌ	**/d/** and **/k/** cannot be next to each other in an onset.
kβ̞ɪd	CCVC syllable which follows permissible syllables	ʂkβ̞ɪd	Triple consonant usage in a syllable is not allowed.

3. Syllable System

Syllable Construction

- It does follow the Maximum Onset Principle.
  - For example with words like **/dβ̞ʊtɪ/** (as seen below) syllables are separated as **/dβ̞ʊ·tɪ/** instead of **/dβ̞ʊt·ɪ/** because consonants are maximally assigned to the onsets of syllables

Multi-Syllable Words Diagram

Word	Syllables*	Syllables
dβ̞ʊtɪ	dβ̞ʊ•tɪ	CCV•CV
ɪβæʂʊ	ɪ•βæ•ʂʊ	V•CV•CV
ʂʌgʊkʁɭæ	ʂʌ•gʊk•ʁɭæ	CV•CVC•CCV

*A '•' separates the syllables apart