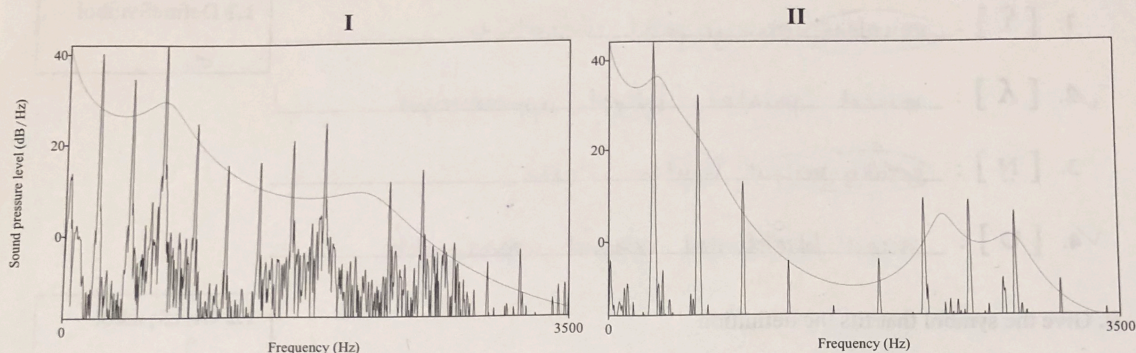


D. Acoustics questions

4.3 IdentifyDisplay

✓ 10. What kinds of plots are these: sound spectrum



11. Which of the two vowels above has a higher pitch, I or II: I

Briefly explain how you knew

4.4 ReadFrequency

Higher frequency, cycles per second, produces high pitched sounds and I has more harmonics at high frequencies than II.
How would we estimate frequency in Hz of each spectrum?

E. The speed of sound in helium is much faster than the speed of sound in regular air. If a person first fills their lungs with helium, how will their [ə] sound different from usual, and why?

This is a tough one! Hint: think about where we've used the speed of sound to calculate some quantity, and how that quantity would change if the speed of sound changed.

The [ə] will sound high pitched because a higher value for the faster speed of sound would increase the number of cycles sound waves oscillate at per second, producing more cycles per second, a higher frequency, in helium a higher pitch.

5 Apply

Name: [REDACTED]

Week 6 quiz

A. Define the symbol—use the **correct order**: *phonation place manner*

- 1. [ʕ] : voiceless pharyngeal fricative
- 2. [ʎ] : voiced palatal lateral approximant
- 3. [ɺ̃] : creaky-voiced alveolar nasal
- 4. [ʋ] : voiced labiodental central approximant

1.1 DefineSymbol

2

B. Give the symbol that fits the definition

- 5. creaky-voiced alveolar trill: [ʀ̤]
- 6. voiceless palatal ejective stop: [c']
- 7. voiceless dental lateral approximant: [ɬ̥]

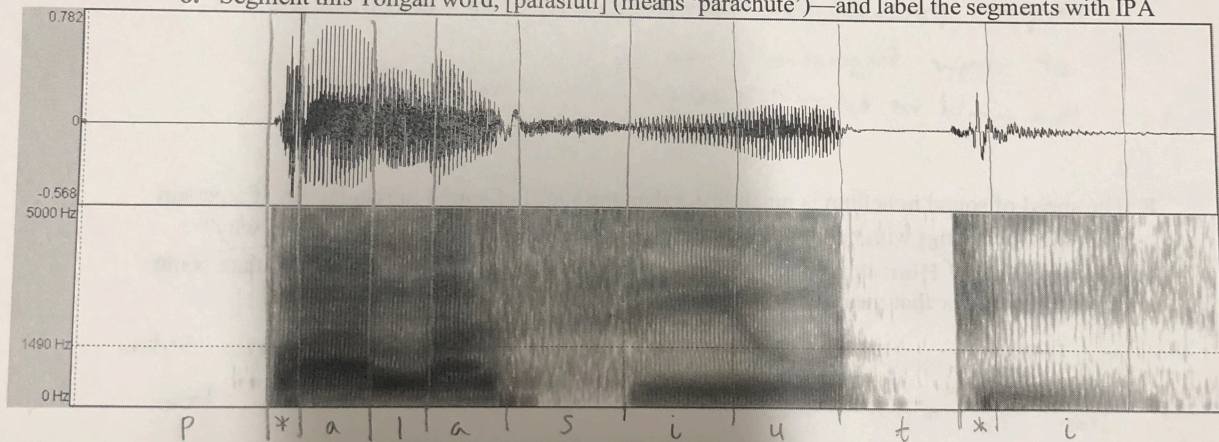
1.2 GiveSymbol

2

4.1 SegmentSpectro

2

C. 8. Segment this Tongan word, [palasiuti] (means 'parachute')—and label the segments with IPA



9. Segment this Tongan word, [konifelenisi] (means 'conference')—and label the segments with IPA

