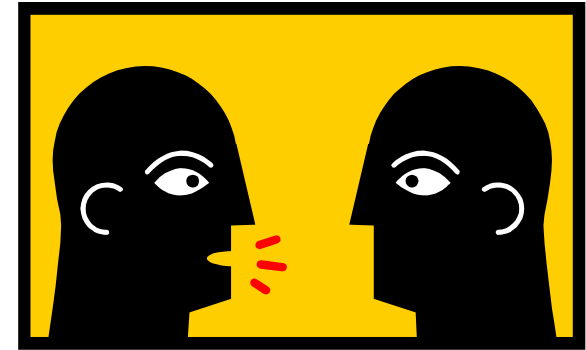# How to Check Your English Pronunciation

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Introduction

- You want to check your English pronunciation.

- You get a native speaker of English.

- You speak and he/she checks.

- But,

    - It's hard to find a native speaker.

    - Private lessons are expensive.
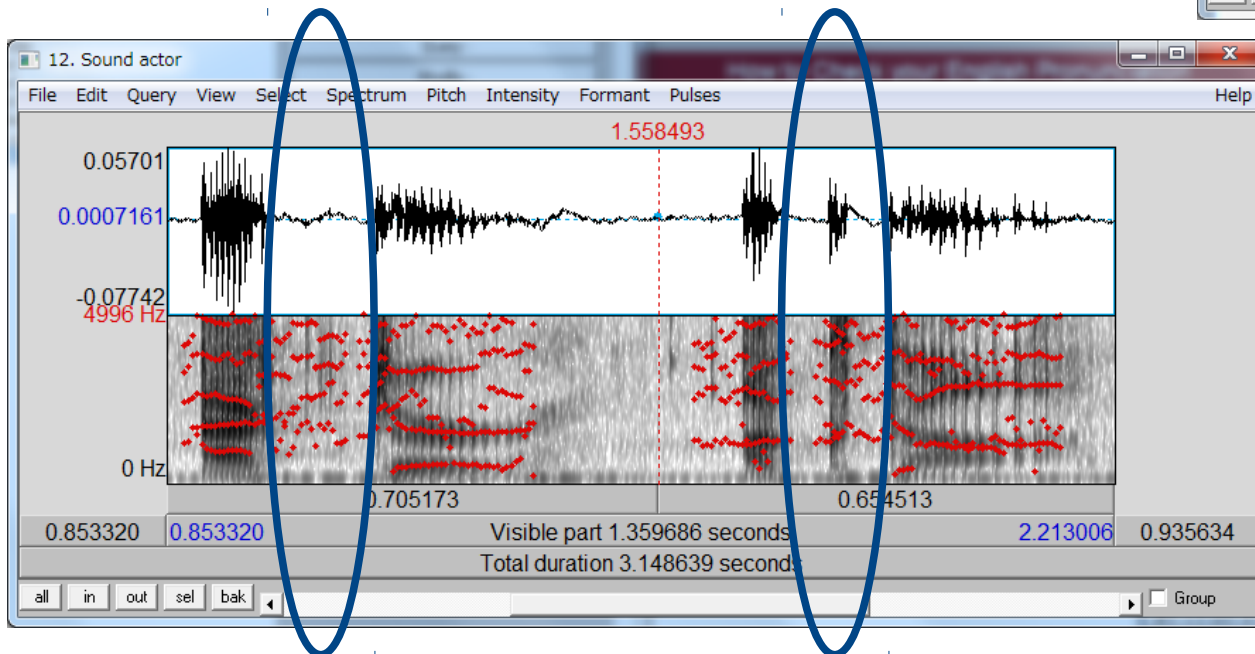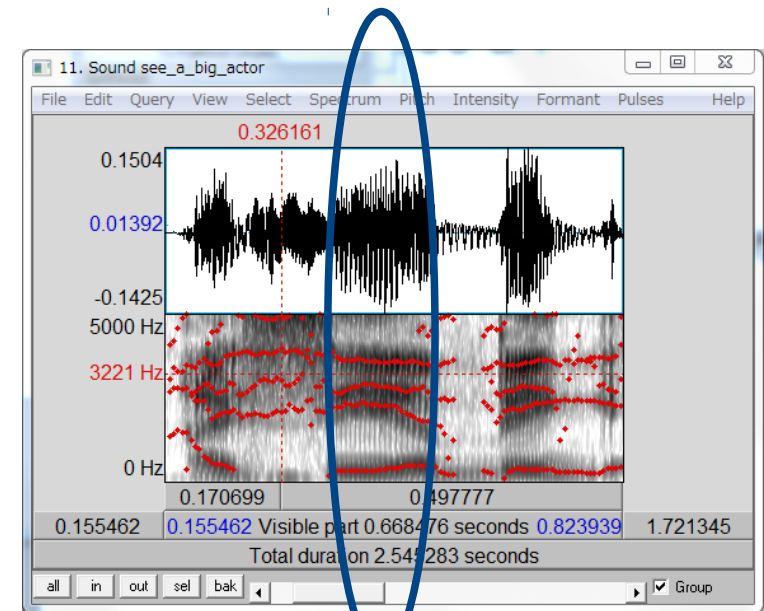
- So, use a computer!

Praat Quickstart

- Download Praat (praat.org)
- Start Praat.
- Close "Praat Picture" window.
- Click "New" → "Record mono Sound..."
- Click "Record".
- Say, "I see a big actor by the food cart."
- Click "Stop".
- Click "Play" to check your recording.
- Input "big cart" in the "Name" box.
- Click "Save to List & Close".

Praat Quickstart

- Click "View and Edit".

- Listen to "see a".
  - No break between words!

- Listen to "actor" /æktɚ/.
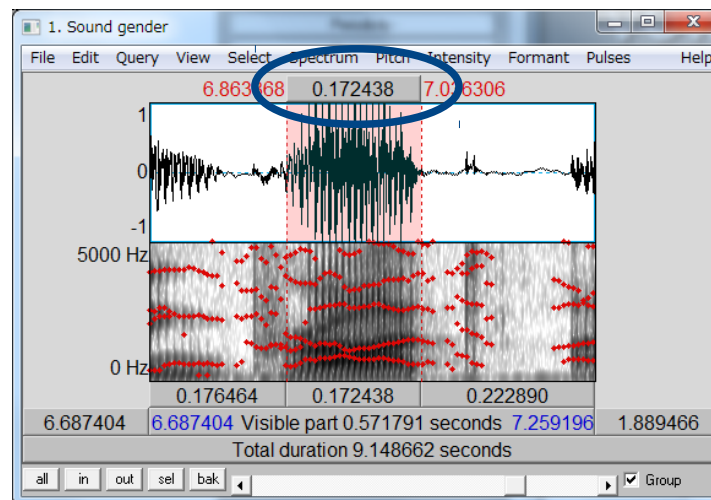 - No sound between /k/ and /t/.

Vowel Length

- Record the following sentences
  - "I will beat my friend and find a red bead in the game."
  - "John said that he would set his alarm for 6am.
  - "My back hurts today because my bag is so heavy."
  - "The broken saws were fixed with some black sauce at the shop."

Vowel Length

- Measure the time length of the vowels (母音):

  – "I will b<u>ea</u>t my friend and find a red b<u>ea</u>d in the game."

  – "John s<u>ai</u>d that he would s<u>e</u>t his alarm for 6am.

  – "My b<u>a</u>ck hurts today because my b<u>a</u>g is so heavy."

  – "The broken s<u>aw</u>s were fixed with some black s<u>au</u>ce at the shop."

Vowel Length

Vowel before voiceless final consonant（有声最終子音）			Vowel before voiced final consonant（無声最終子音）		
word	IPA	length (ms)	word	IPA	length (ms)
beat	b i t	97	bead	b i d	277
set	s ɛ t	71	said	s ɛ d	196
back	b æ k	142	bag	b æ g	304
sauce	s ɔ s	153	saws	s ɔ z	357

Compare

My ratio = 1 : 2.4

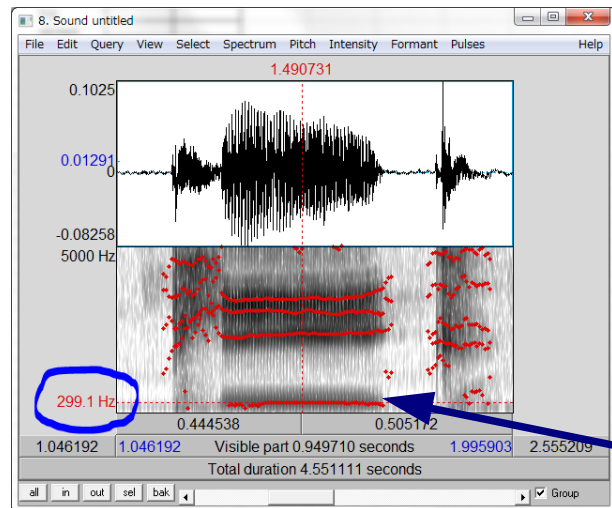Typical native = 1 : 2

Yours = 1 : ___?___

Vowel Location

- Record the following (strange) short story.

    – "One morning, after I brushed my teeth, I fixed my hair in a special way. But while doing that, I bit my tongue and then my feet started to hurt. I tried to keep from crying, but then my hip broke and I went to the hospital. I picked my favorite doctor. He took a short peek at me, gave me some medicine, and sent me home."
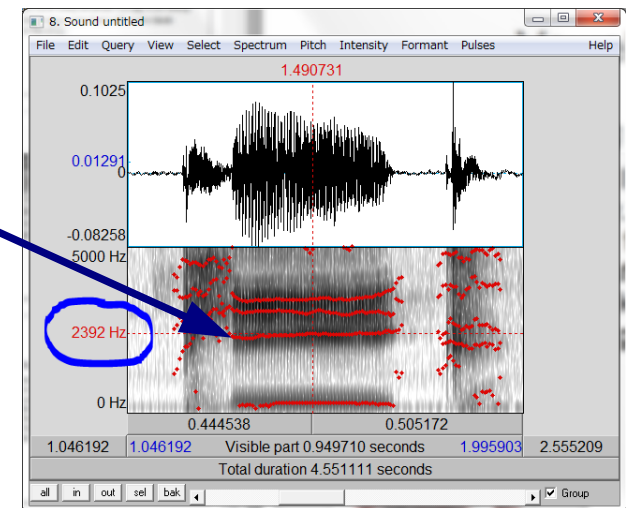
Vowel Location

- Measure the (F1,F2) values for the vowels:
  - "One morning, after I brushed my teeth, I fixed my hair in a special way. But while doing that, I bit my tongue and then my feet started to hurt. I tried to keep from crying, but then my hip broke and I went to the hospital. I picked my favorite doctor. He took a short peek at me, gave me some medicine, and sent me home."
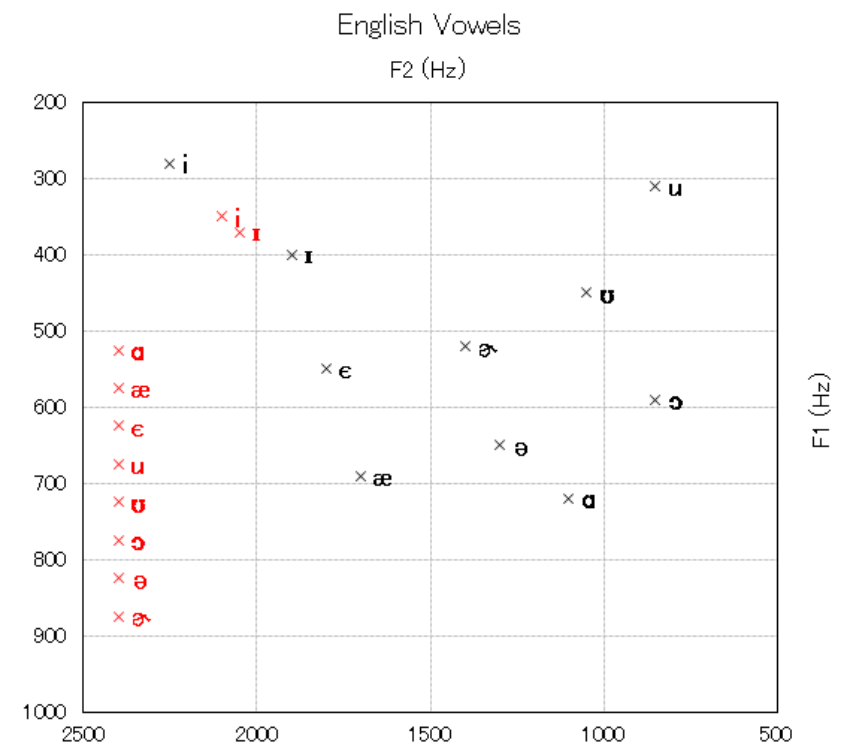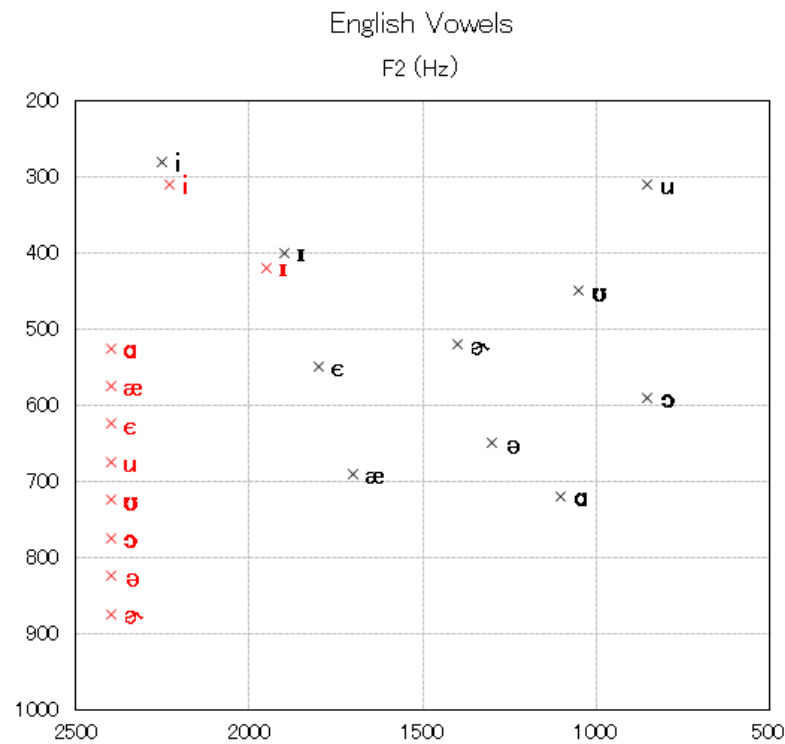
500 < F2 < 2500

200 < F1 < 1000

Vowel Location

- Input the data in the *vowel_location.xlsx* file.
- How does your graph look?
- What does this mean about your pronunciation?

Try for all vowels: http://www.roselab.sci.waseda.ac.jp/resources/file/Vowels.xls

Just for Fun

- Record the following sentence.
  - "Hello, my name is _____. I'm a boy/girl. I wonder what I would sound like if I were a girl/boy. Well, using Praat, I can find out!"
- Click "Convert" → "Change gender..."
  - Pitch floor (Hz): 50
  - Formant shift ratio:
    - Male → Female: 1.1
    - Female → Male: 0.9
  - New pitch median (Hz):
    - Male → Female: 220
    - Female → Male: 120

Thank you!

- Evaluate your own pronunciation using Praat.
- Enjoy yourself.
- Good luck!

/aɪ.spik.ɪŋglɪʃ.
wɪɵ.gʊd.
pronʌnsiɛɪʃən/