

Praat Guide

Begin by downloading *Praat* from www.praat.org

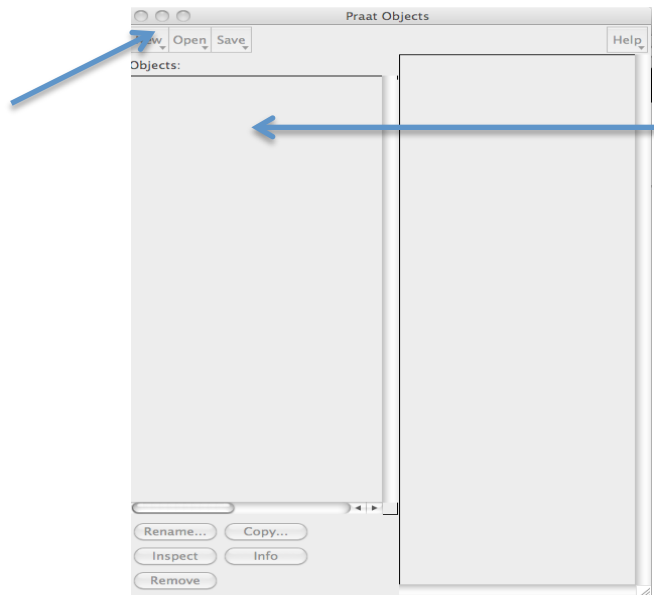
Listening to files in *Praat*:

1. Click on *Open* → *Read from file*.
2. Choose the file you would like to listen to. It will show up in the *Objects* list. (See Figure 1 below.)
3. If you'd just like to listen to the file, click on the *Play* button. If you'd like to play parts of it (and view its waveform and / or spectrogram), click on *View & Edit*.

Note: You will not use the *Praat* picture screen now, so you can close it if you find that it gets in the way.

Recording in *Praat*:

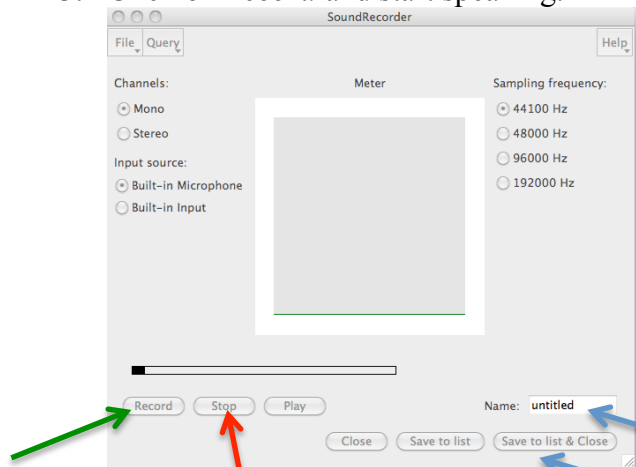
1. If you are in a room that is a bit loud, you may wish to use a microphone and / or headset. Otherwise, you should be able to record by using your computer's internal microphone and speakers.
2. Go to *New* → *Record mono sound*.



This is the objects list. (It is empty before you record or open a file.)

Figure 1. *Praat* objects list.

3. Click on *Record* and start speaking.



Click to record

Click to stop recording

Type file name here when you are done recording. Then click on *Save to list & Close*.

Figure 2. Praat Sound Recorder window.

4. When you are done recording, click on *Stop*.
5. Type in the name of the file, and then click on *Save to list & close*. The sound will show up in the *Objects* list. (The objects list is what you see in Figure 1 above.)
6. Click on the sound on the Objects list, and then click on *Save* → *Save as WAV file*.

Analyzing files in Praat:

1. Once you have opened the file, click on *View & Edit*. A *Sound* window should open with the waveform on the top half of the screen and the spectrogram on the bottom. If the spectrogram is missing, you can click on *Spectrum* → *Show spectrogram*.
2. To zoom in on a portion of the file, highlight it by clicking on the beginning of the part that you want to see and dragging your mouse until you have highlighted the portion you wish to see. Then click on *sel*.
3. To view vowel formants, click on *Formant* → *Show formants*.
4. To measure vowel formants, highlight the steady state of the vowel. The steady state is the portion that shows little movement in formant values. You can measure the average value of each formant by doing the following:
 - a. Click on *Formant* → *Get first formant* to get F_1 values.
 - b. Click on *Formant* → *Get second formant* to get F_2 values.
 - c. Click on *Formant* → *Get third formant* to get F_3 values.

5. To measure the duration of vowels, highlight the steady state of the vowel. The value that appears in the grey bar below the highlighting tells you how long the segment is. Refer to figure 3 below.
6. To measure pitch, click on *Pitch* → *Show pitch*. The blue line that you see is the F_0 contour.
7. To measure intensity, click on *Intensity* → *Show intensity*. The yellow line that you see indicates intensity.

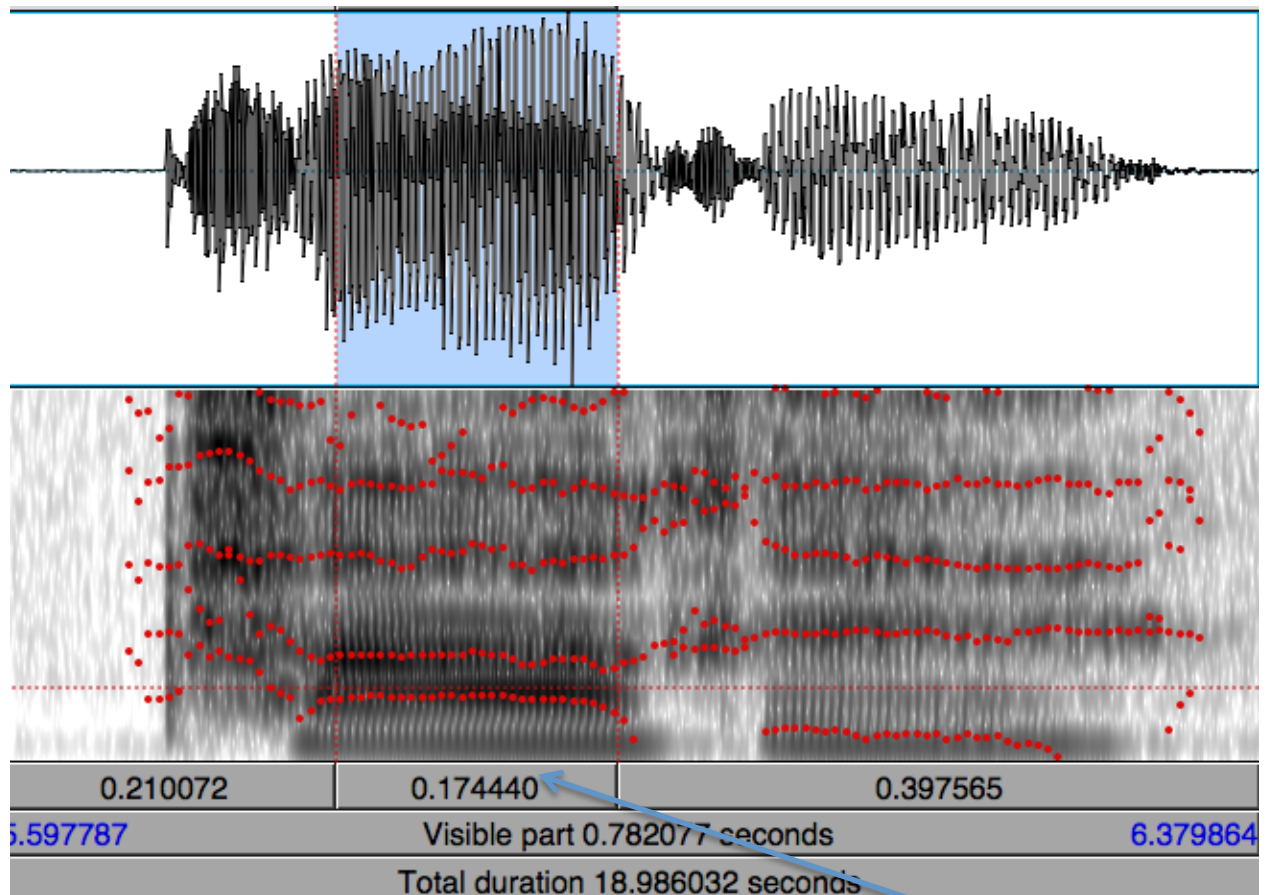


Figure 3. Measuring duration in Praat.

vowel steady state duration

Note that this value is in seconds, so you will need to convert it to milliseconds. Thus, you will need to multiply the value in seconds by 1,000. The vowel in this word is therefore 174 milliseconds.

For more information and an official Praat manual, visit http://www.fon.hum.uva.nl/IFA-publications/Others/Courses/SpeechRecAndSyn/Literature/praat_manual.pdf