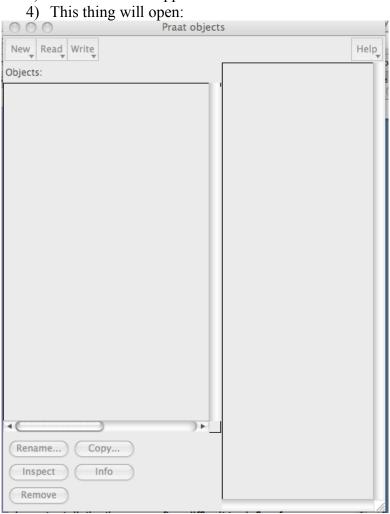
1) Download from link.

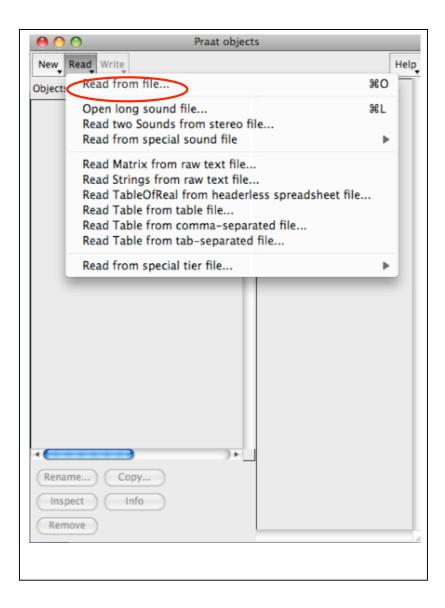
- 2) Double click on the thing that downloads. This will create an application (the icon is a mouth & an ear.)
 3) Double click on application icon.



- 5) Download the .wav file of Obama (that just means the soundfile). I've attached the file so all you really need to do is download the attachment.
 - a. If you have a PC: right click on "this link" and click "Save Linked File" or "Save Linked File to Downloads"
 - b. If you have a Mac: hold the "control" bottom on the bottom left of keyboard and click on "this link". Various options will come up click "Save Linked File" or "Save Linked File to Downloads". (This is the same operation as a right click on a PC).

Opening up your Sound File in Praat

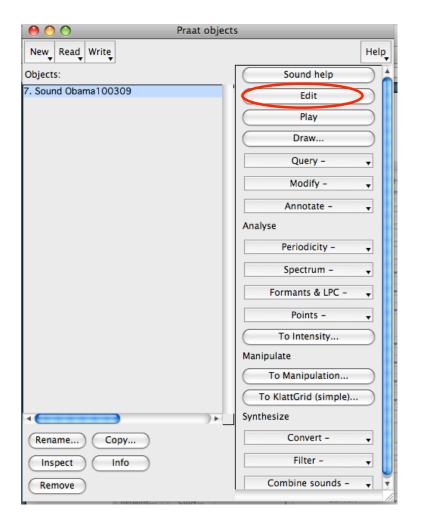
Notice that the middle top button is "read." Click this, then click "Read from file."



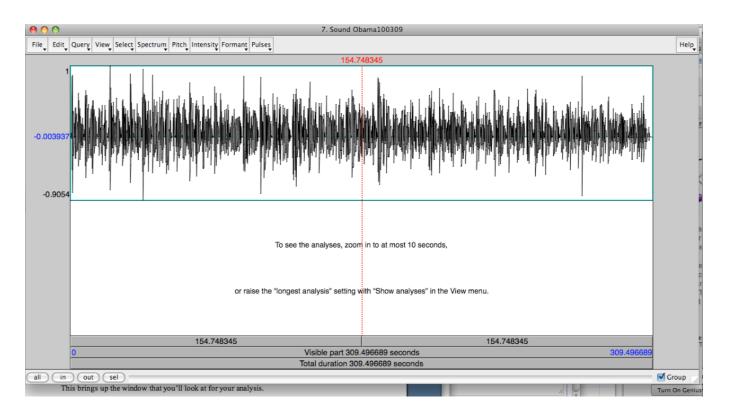
Now you have "Obama100309.wav" in your list of objects on the left.

| New Read Write | | Hel |
|-------------------|-----------------------|-----------|
| bjects: | Sound help | \supset |
| Sound Obama100309 | Edit | \supset |
| | Play | 5 |
| | Draw | 5 |
| | Query – | Ŧ |
| | Modify – | Ŧ |
| | Annotate - | Ŧ |
| | Analyse | |
| | Periodicity – | Ŧ |
| | Spectrum – | Ŧ |
| | Formants & LPC - | Ŧ |
| | Points – | Ŧ |
| | To Intensity | \supset |
| | Manipulate | |
| | To Manipulation | \supset |
| | To KlattGrid (simple) | \supset |
| | Synthesize | |
| Rename) Copy | Convert – | Ŧ |
| Inspect Info | Filter – | Ŧ |
| Remove | Combine sounds - | Ŧ |

Make sure it's highlighted, and then click on Edit.

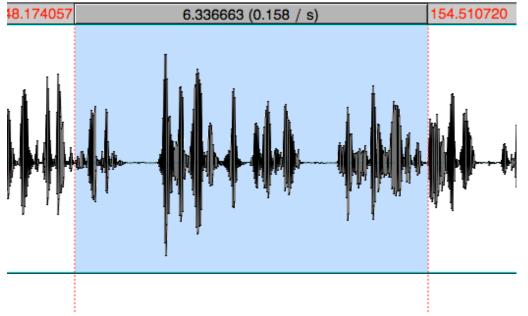


This brings up the window that you'll look at for your analysis.

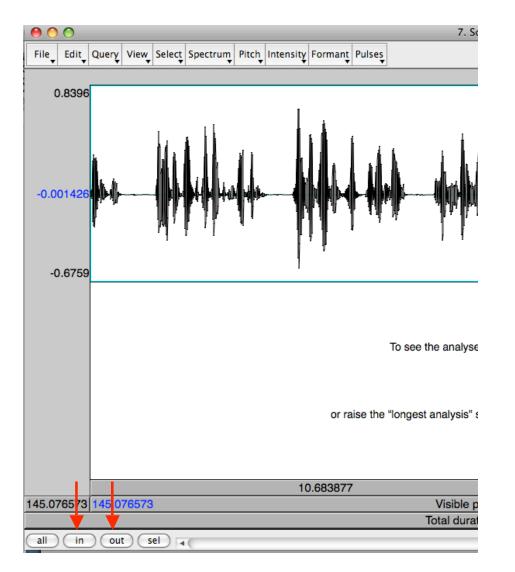


Zoom in so you can see it more closely :

by either highlighting a section of it

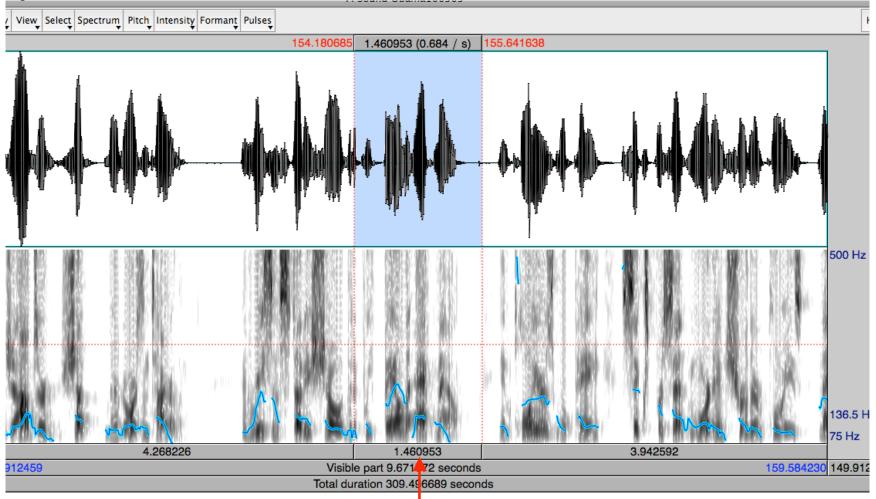




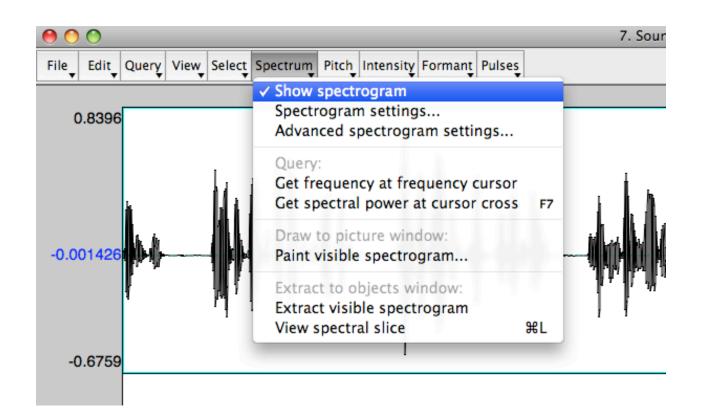


You can zoom out again by clicking "out"

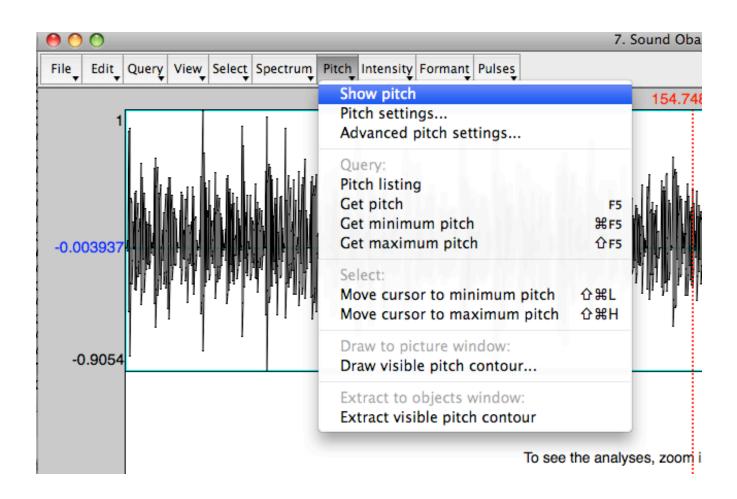
To play any of it, click on a part and either hit SHIFT to play, or highlight a segment and then click the bottom grey tab to play the segment.



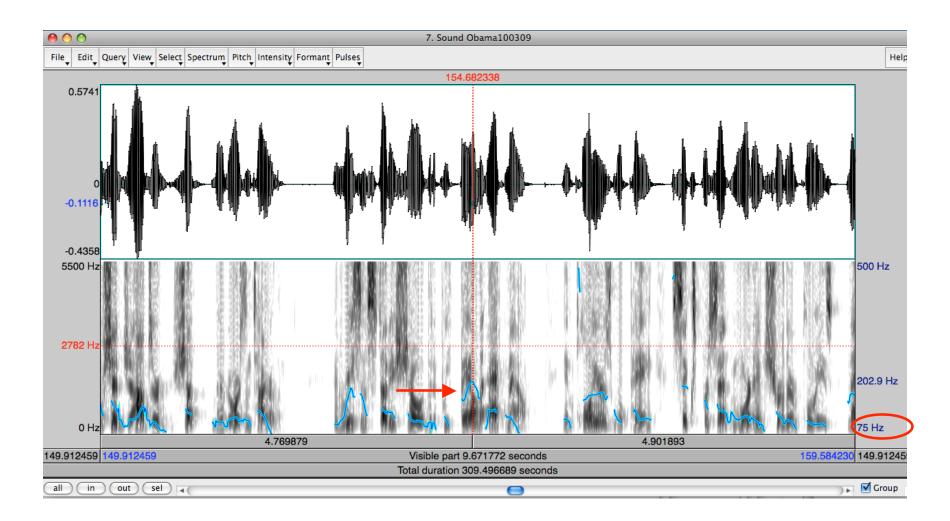
Click on "Spectrum" and "show spectrogram"



Now click on "pitch" and "show pitch"



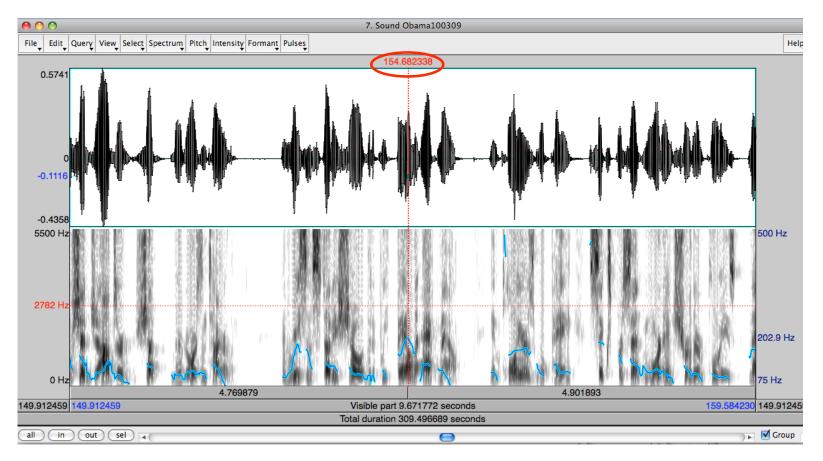
Now you've got the pitch contour below. It's the blue thing O



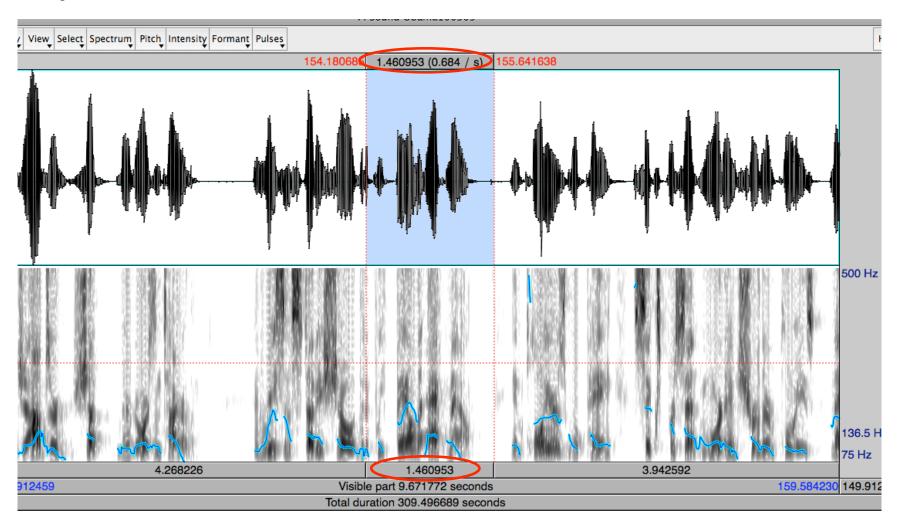
You can see the pitch of any given part by putting the vertical line on the sound file. On the right is the pitch in Hz (circled).

You can also click on the Pitch pull-down menu to get to various options, such as "get pitch" (which will give you the same result as above), get minimum pitch, get maximum pitch (for these two you should select a whole phrase, and it'll give you the highest or the lowest pitch in it. This would be if you are interested in looking at pitch range or something like that.)

Also note that things are timestamped at the top.



As well as the fact that you can get the length of a selection by looking at the top or bottom. This is in case you're interested in looking at duration.



So this next part is just if you want to, it's definitely not necessary. It's how to do Textgrids, where you label each word. Make sure to SAVE your textgrid if you do make one – the instruction for this is at the end. But if you don't save it, it'll go away !

| 0 0 0 | Praat objects |
|--|------------------------|
| New Read Write | Help |
| C(Objects: | Sound help |
| Ct7. Sound Obama100309 | Edit |
| | Play |
| | Draw |
| Al | Query - 🗸 |
| Al Al C A Al C C C C C C C C C C C C C C | Modify - |
| A | Annotate – |
| Al | Annotation tutorial |
| Al | To TextGrid |
| | To TextTier |
| C. | To IntervalTier |
| C4 | To TextGrid (silences) |
| | Points – 👻 |
| | To Intensity |
| Al | Manipulate |
| | To Manipulation |
| | To KlattGrid (simple) |
| M • () | Synthesize |
| Rename Copy | Convert – 🗸 |
| Inspect Info | Filter – 🗸 |
| Remove | Combine sounds – 🚽 🍸 |
| | 1 |

On the right, click on "annotate," then "To TextGrid." This then asks you the following question, with these current default settings:

| \varTheta 🔿 Sound: To | TextGrid |
|---------------------------------|-----------------|
| All tier names: | Mary John bell |
| Which of these are point tiers? | bell |
| Help Standards | Cancel Apply OK |

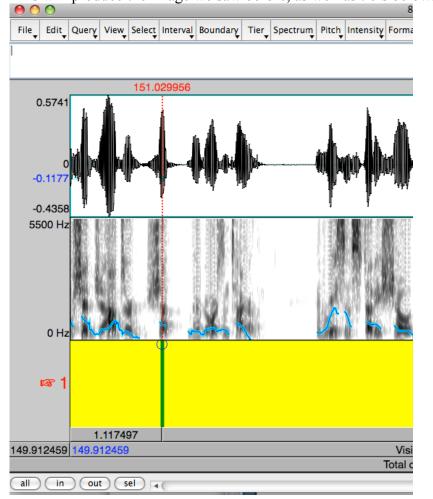
These don't really matter. Go ahead and change the first one to "Words" and don't bother doing anything to "bells."

| l | \varTheta 🔿 🔿 Sound: To | o TextGrid |
|---|---------------------------------|-----------------|
| ē | All tier names: | Words |
| | Which of these are point tiers? | bell |
| | Help Standards | Cancel Apply OK |

Then click "OK". Now your object list will show this:

| 000 | Praat objects | |
|-------------------------|----------------|-----------|
| New Read Write | | Help |
| Objects: | TextGrid help | |
| 7. Sound Obama100309 | Edit | |
| 8. TextGrid Obama100309 | Edit | |
| | & Sound: Edit? | |
| | Draw | |
| | Draw | \supset |
| | & Sound: Draw? | \supset |
| | & Pitch: Draw? | \supset |
| | Query – | Ŧ |
| | Modify – | Ŧ |
| | Analyse | |
| | Extract tier | \supset |
| | Extract part | \supset |
| | Synthesize | |
| | Merge | \supset |
| | | |
| | | |
| ۰ () |) + [| |
| Rename Copy | | |
| Inspect Info | | |
| Remove | | |
| | | 1 |

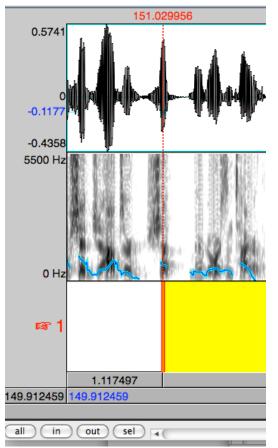
Click on "Sound Obama100309" and then hold down SHIFT. Then click on "TextGrid Obama10030". Now click on "Edit" on the right.



This will produce the image we saw before, as well as tiers below.

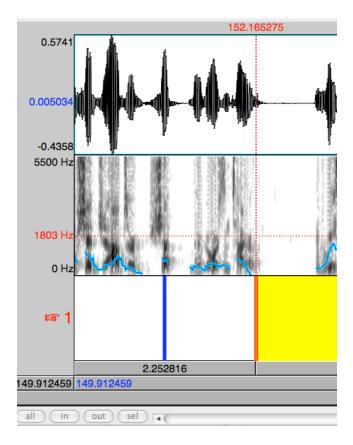
To create a line, click on any point in the sound image, like the red dotted line. Then click on that circle. It will create a line segment..

| 00 | 0 | | | | | | |
|-------|------|-------|------|--------|----------|----------|-----|
| File, | Edit | Query | View | Select | Interval | Boundary | Tie |



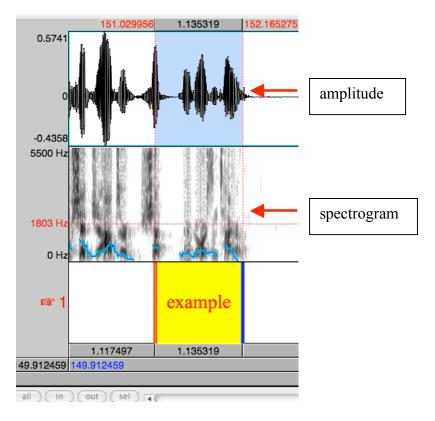
Now you can put a line at the end of the word.

| 00 | 0 | | | | | | | | |
|------|-------|-------|-----------|--------|----------|----------|-------|----------|-------|
| File | Edit_ | Query | View • | Select | Interval | Boundary | Tier_ | Spectrum | Pitch |



Now click on the inside of the lines, it'll make it yellow. You can type the word name.





Now that you've put something in it, make sure to save it!

| | | | View | Select | Interval | Boundary | Tier | Spectru |
|----------------------------------|---|--|---|--|---|-----------|------|-----------|
| Pre | eferen | ces | | | | | | |
| Dr Dr Dr | aw vis aw se aw vis | picture sible so lected sible Te sible so | und sound xtGri | d | xtGrid | | ł | |
| Ex Ex Ex Ex | tract s tract s tract s tract s | selecte selecte | d sour d sour d sour d Text | nd (pre nd (tim nd (win tGrid (| | 0) | | |
| Wr Wr Wr Wr Wr Wr | ite se ite se ite se ite se ite se ite Te | lected lected lected lected lected lected | sound sound sound sound sound to tex | to All to All to Ne to Ni to FL to FL | AV file FF file C file Xt/Sun ST file AC file text file | file # | S | , pr 6/17 |
| | | tor scri litor sc | - | | | | | |
| Clo | ose | | | | | æ | w | |
| 19.9 [.] | 12459 | 0.8 | 71071 12459 | | - | | 1 | |

Click "Write TextGrid to text file" and it'll take you to what to save it as.

You may notice that the section I segmented isn't actually a word. You can move the lines back and forth by clicking them and dragging them. Ways to determine what a word is by eyeballing it – often it'll coincide with the amplitude. Also, a note about the spectrogram. The dark parts are the vowels, typically, and the lighter parts are consonants or silence, so by listening and by eyeballing it you can figure out where words begin and end. You don't need to worry about this, it's just for fun and for if you're interested.

Let us know if you have any questions!!!! Have fun Praating :-D