

Lecture 6 (15 November 2012)**Assignment 11: read Hayward chapter 6.**

11a. You should by now approximately know what a formant is. But just to make absolutely sure, prove it to me again on the basis of a small waveform. To create it, record your own /i/ with a low pitch (with a working microphone). In Praat's sound window (where you can Zoom In and Zoom Out), select a part that is ten vocal periods long, then **Extract** this part and **Draw** it to the Picture window. From its duration, determine its F0 (show me the computation). Then zoom in a bit more and select a part that contains ten periods of the slow resonance, and **Draw** it. From the duration of this, determine the first formant (F1). Then zoom in a bit more again and select a part that contains ten periods of the fast resonance, and **Draw** it. From the duration of this, determine the second formant (F2).

11b. What events in your body cause the F0? What events cause F1 and F2?

Assignment 12: headered tables.

In assignment 10 you have obtained a table in the Info window (with the second script, for instance). You can save these contents of the Info window to a text file on disk. You then read this file into Praat with **Read Table from tab-separated file...** Keep the table for assignment 14.

In the **Query** menu, you can now do several tests:

12a. Do a difference test on the columns *aa* and *ie*, and on the columns *i* and *ie*, and report them.

12b. Are the confidence intervals of the difference, and the degrees of significance comparable to what you found before (make this explicit)? Please note that the test is one-sided, i.e. it tests the null hypothesis that the first variable is not greater than the second.

12c. What significance and confidence interval do you get for the difference between the columns *ie* and *aa* (instead of *aa* and *ie*), and for the columns *ie* and *i*? What are the significances for the two-tailed tests (i.e. *aa* versus *ie*, and *i* versus *ie*)?