

Name: \_\_\_\_\_

Section: \_\_\_\_\_

## Homework 5 Due February 16/17

### 1. Transcription

a. Hungarian: Narrowly transcribe the words in (near) minimal pairs as you listen to hw5\_1.wav. Each pair will be repeated three times.

- |    |   |  |   |              |  |   |  |   |             |
|----|---|--|---|--------------|--|---|--|---|-------------|
| 1. | [ |  | ] | ‘hen’        |  | [ |  | ] | ‘he closes’ |
| 2. | [ |  | ] | ‘to walk’    |  | [ |  | ] | ‘to cheat’  |
| 3. | [ |  | ] | ‘at’         |  | [ |  | ] | ‘handle’    |
| 4. | [ |  | ] | ‘his father’ |  | [ |  | ] | ‘he gives’  |
| 5. | [ |  | ] | ‘lizard’     |  | [ |  | ] | ‘grease’    |

b. Russian: Narrowly transcribe the words in (near) minimal pairs as you listen to hw5\_2.wav. Each pair will be repeated three times.

- |    |   |  |   |                   |  |   |  |   |               |
|----|---|--|---|-------------------|--|---|--|---|---------------|
| 1. | [ |  | ] | ‘to beat’         |  | [ |  | ] | ‘way of life’ |
| 2. | [ |  | ] | ‘Dimitry (dimin)’ |  | [ |  | ] | ‘smoke’       |
| 3. | [ |  | ] | ‘bundle’          |  | [ |  | ] | ‘cloud’       |
| 4. | [ |  | ] | ‘blue’            |  | [ |  | ] | ‘son’         |

## 2. Formant Extraction

a. Download hw5\_3.wav.

b. Get the time point (s), F1, and F2 at the 1/3 and 2/3 temporal points of the vowels underlined below. To do this, refer back to “Formant Measurements in Praat (pdf)” on the L541 Lab site. You will have three sets of F1 and F2 values for each vowel (for example, T1\_Time, T1\_F1, T1\_F2, T2\_Time, T2\_F1, and T2\_F2).

H, I, double P, O, C, R, E, N, E...

c. Enter the measurements for each vowel into an excel sheet. Remember to organize the sheet in a way that it is easy to see where the measurement came from (vowel, time point, F1, F2).

c. Plot the measurements using the scatter plot function in Excel (or some other graphing program you like). Use the sample excel sheet and plot in “Creating a Vowel Chart in Excel (pdf)” as a guide. Note: Remember to reverse the values on the x and y axes so that the plot resembles the vowel chart we usually see.

d. Turn in a printout of the excel sheet with the formant values and the vowel plot. (You can put the plot in another readable format, if you use a different graphing program.)