

Week 5 Assignment

Before class on Friday, Sept. 25:

- Have the file *week5.zip* from the Week 5 assignments page downloaded onto your computer *before* class on Friday. Unzipped, this is a folder with two versions of the dataset we'll use in the in-class exercise.

- Read the following article, available from the UT Library Catalog:

Thomas, Erik K. (1997). A rural/metropolitan split in the speech of Texas Anglos. *Language Variation and Change* 9 (3). 309-332.

(On the UT Library website, select *Journal* and type in *Language Variation and Change*. Select *On-line > Cambridge University Press Journals Complete*.

Select *1990's > 1997 – Volume 9 > Issue 3*.

The article is the second item in that issue. Click on *PDF* to download it).

- Answer the following questions about the article. For each answer, give the page number of the point in the article where you found the relevant information.

(1) Monophthongization is the diachronic change of the diphthong [aɪ] to the monophthong [a]. The monophthongal pronunciation is less common in words where the vowel is followed by a voiceless stop, as in *night*, than it is in other contexts. In the Texas sample examined in this article what was the frequency of occurrence of the monophthongal pronunciation of *night* in the following groups?

- African-American Texans
- Hispanic Texans
- White Anglo Texans
- White Anglo Texans who have lived in Texas their whole lives
- White Anglo Texans, aged 18–29, who have lived in Texas their whole lives in a town or rural area
- White Anglo Texans, aged 18–29, who have lived in Texas their whole lives in a very large metropolitan area

(2) F2 at the offset of the vowel is higher in the diphthong [aɪ] than in the monophthong [a]. Was F2 at the offset of this vowel in pre-voiceless position *significantly* higher for high school students in metropolitan areas than for those in rural areas?

(3) Southern Shift affects F2 at the onset of the diphthong [eɪ] as in *day*. Onset F2 is lower for speakers who have adopted the Southern Shift than for those who haven't. Was F2 at the onset of this vowel *significantly* lower for high school students in metropolitan areas than for those in rural areas?

- (4) According to the author, what is the explanation for the differences in participation in the Southern sound changes in Texas towns and rural areas vs. Texas metropolitan areas?

In class on Friday, Sept. 25: An exercise in graphing

- (1) Open RStudio.
- (2) In the upper righthand window within *RStudio*, select *Import Dataset*.
- (3) Use *Browse* to select the file *luganda1.xlsx* (or *luganda1.txt*) on your computer. Click *Import*.
- (4) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
attach (luganda1)
```

- (5) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
height.aov = aov (f1 ~ height)
```

- (6) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
summary (height.aov)
```

- (7) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
TukeyHSD (height.aov)
```

- (8) Select the results tables for *height.aov* created on steps (6) and (7), and copy them into a word-processing or text file.

- (9) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
frontness.aov = aov (f2 ~ frontness)
```

- (10) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

```
summary (frontness.aov)
```

(11) Copy the following text after the prompt (>) in the lower lefthand (*Console*) window, and hit *Return*.

TukeyHSD (frontness.aov)

(12) Select the results tables for *frontness.aov* created on steps (10) and (11), and copy them into a word-processing or text file.

By 6 PM on Friday, Sept. 25, submit the following through Canvas:

A single PDF document, including the following:

- The answers to the four questions above about Thomas (1997)
- The two tables of results for *height.aov*, along with an answer to the following question: Which groups of vowels in this sample are significantly different in F1?
- The two tables of results for *frontness.aov*, along with an answer to the following question: Which groups of vowels in this sample are significantly different in F2?