Praat Scripting

 $\rm LI~545-Summer~2013$ M/W 1:30 - 3:20 in 2353 Mason Hall

T/Th 11:00 - 12:50 in 2001-B MLB

Instructor: Kevin McGowan Office Hours: 3:30 - 4:30 Monday

kbmcgowan@stanford.edu 1:00 - 2:00 Thursday 2462 Mason Hall or by appointment

Course Description and Goals

This course introduces basic automation and scripting skills for linguists using Praat. The course will expand upon a basic familiarity with Praat and explore how scripting can help you automate mundane tasks, ensure consistency in your analyses, and provide implicit (and richly-detailed) methodological documentation of your research. Our main goals will be:

- 1. To expand upon a basic familiarity with Praat by exploring the software's capabilities and learning the details of its scripting language.
- 2. To practice a set of scripting best practices to help you not only write and maintain your own scripts but evaluate scripts written by others.

The course assumes participants have read and practiced with the Intro from Praat's help manual. You should go do that now if you haven't already. Go on. I'll wait.

Requirements

1. Attendance & Participation

60%

Reading will be minimal for this course, but hands-on practice is everything. Come, listen, participate, and ask questions.

2. Homework Assignments

40%

Along with numerous (ungraded) in-class exercises, there will be 4 homework assignments to hand-in. These will be graded on a scale from 'exists' to 'does not exist'. Assignments that fail to exist will receive a corresponding amount of credit.

Our minimal required readings are from the Praat manual, are listed in bold face on the course schedule, and should ideally be completed prior to the date listed on the syllabus. I recommend the following additional resources:

Will Styler From the 2011 LSA Praat workshop:

http://savethevowels.org/praat/UsingPraatforLinguisticResearchLatest.pdf

David Weenink A draft book by one of Praat's main authors. Chapter 4 covers scripting. http://www.fon.hum.uva.nl/david/sspbook/sspbook.pdf

Course Schedule

Day 1: Hello Praat, Hello world!

We'll briefly review key concepts in Praat (the various windows, dynamic versus fixed menus, object properties, etc.) before tackling the classic 'Hello, world!' program in (at least) four different ways.

Reading: Intro 1-3, Scripting 1

Day 2: Working with data and objects

An introduction to Praat's internal data types, with a heavy emphasis on strings.

Reading: Scripting 2-4

Day 3: Annotation, Labeling, and Segmentation

Textgrids are Praat's way of allowing you to make your segmentation and analysis repeatable —and they offer many opportunities to simplify your life via scripting.

Reading: Praat Intro 7

Day 4: Getting more complicated: Variables, Flow Control, and Conditionals

Reading: Praat Scripting 5

Day 5: Even more complicated: Variables, Flow Control, and Conditionals

Day 6: Blurring the line between scripting and programming

Reading: Scripting 6-7

Day 8: Using old code

Finding and using scripts from the web: variable-substitution-free scripting, checking others' math, the dangers of the 'Remove' command, etc.