Praat Scripting Workshop Tucson, May 2010

- 1. What is the goal of scripting? To speed up work, avoid repetition and minimize error.
- 2. How do we make it work? Look for repeated patterns, make variables to repeat the tasks and get the computer to work while you do something else.
- 3. What can a Praat script do for you? The same as the menu in Praat can do and a bit more, and repeat the same thing over and over.

First script: Praat > New Praat script > Edit > Clear history
Back to Objects window: Read a sound file (open it in Praat) and Play it and Remove it
Back to the script: Paste history > Run
You want to Play it five times? Add this to the script

for i to 5 Play endfor

- 4. In a script, variables are places to store data and access it later
- 5. Variables include: numbers, strings and Praat objects
- 6. Variables need to start with lower case: name, nameSound, nameSound11
- 7. Variables are created by assigning a value to a string with the = sign

t = 5q = 2

7. Math operations on numeric variables: *, /, +, -, sqrt(), sin(), etc. (cf. mathematical functions)

name = t * q printline 'name'

8. Multiply and divide first, addition and subtraction second, left to right, parentheses override default rules

```
name = (t + q) / 2
printline 'name'
```

9. String variables allow letters and numbers but do not allow mathematical functions

10. They are always followed by the dollar sign:

```
name$ = "Hello"
printline 'name$'
```

11. There are many string functions: left\$(), mid\$(), right\$(), "concatenate" + name\$ = "Hello" name1\$ = left\$(name\$,3) name2\$ = name\$ + name1\$ printline 'name\$'

- 12. Objects are defined by Praat and have a multitude of options: Sound, TextGrid, Formant, Pitch, Spectrum, etc.
- 13. You first figure out how to get the info you need from the menu (what object you need?) and then paste history in a Praat script

Open a TextGrid in Praat Get start point of second interval in tier 3 Get end point of second inerval in tier 3 Paste history in script

14. for/endfor, if/endif

```
for i to 100
    select object
    execute function
    store result of function
endfor

if variable = something
    create variable
    or execute function
    or store result
endif

(otherwise...)

15. String objects: New > Create Strings as file list...
16. Table objects: New > Create table with column names...
```