

Package ‘speakr’

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Type Package

Title A Wrapper for the Phonetic Software 'Praat'

Version 3.2.1

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Description It allows running 'Praat' scripts from R and it provides some wrappers for basic plotting. It also adds support for literate markdown tangling. The package is designed to bring reproducible phonetic research into R.

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URL <https://github.com/stefanocoretta/speakr>

BugReports <https://github.com/stefanocoretta/speakr/issues>

Encoding UTF-8

RoxygenNote 7.2.1

Imports ggplot2, lifecycle, readr, stringr, tibble

Suggests knitr, rmarkdown

VignetteBuilder knitr

Language en_GB

NeedsCompilation no

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| | |
|------------|---------------------------------|
| praat_open | <i>Open files with 'Praat'.</i> |
|------------|---------------------------------|

Description

It opens a file or list of files in the 'Praat' GUI.

Usage

```
praat_open(...)
```

Arguments

... A character vector with the path to the file. Include multiple vector arguments to open multiple files.

Value

Nothing. Used for its side effects.

Examples

```
## Not run:  
# Open a single file  
  
script <- system.file("extdata", "get-formants.praat", package = "speakr")  
praat_open(script)  
  
# Open multiple files  
  
wav <- system.file("extdata", "vowels.wav", package = "speakr")  
tg <- system.file("extdata", "vowels.TextGrid", package = "speakr")  
praat_open(wav, tg)  
  
## End(Not run)
```

praat_plot

Plot waveform and spectrogram

Description

Plot waveform and spectrogram

Usage

```
praat_plot(  
  file,  
  wav,  
  tg = NULL,  
  start = 0,  
  end = NULL,  
  width = 5,  
  format = "png",  
  f0 = FALSE,  
  f0_min = 0,  
  f0_max = 500,  
  spec_max = 5000  
)
```

Arguments

| | |
|----------|--|
| file | Output file path as a string. |
| wav | Wav file path as a string. |
| tg | TextGrid file path as a string. If 'NULL' (the default), a TextGrid is plotted if a TextGrid file with the same name as the wav file is found. No TextGrid is plotted otherwise. |
| start | Start time of the plotting window in seconds. |
| end | End time of the plotting window in seconds. If 'NULL' (the default), plot the entire duration. |
| width | Width of the plot in inches. |
| format | Output file format ('png' by default, or 'pdf'). |
| f0 | Whether to plot f0 ('FALSE' by default). |
| f0_min | If 'f0 = TRUE', minimum f0 value ('0' by default). |
| f0_max | If 'f0 = TRUE', maximum f0 value ('500' by default). |
| spec_max | Maximum frequency for the spectrogram ('5000' by default). |

Value

Nothing. It is used for its side effects.

Examples

```
## Not run:
wav <- system.file("extdata", "vowels.wav", package = "speakr")

praat_plot("vowels.png", wav, f0 = TRUE, f0_max = 200, end = 3)

## End(Not run)
```

```
praat_run
```

```
Run a 'Praat' script.
```

Description

It runs a 'Praat' script, with optional arguments passed to the script.

Usage

```
praat_run(script, ..., capture = FALSE)
```

Arguments

| | |
|---------|--|
| script | A character vector containing the script name. |
| ... | List of arguments to be passed to the script. |
| capture | If set to TRUE, the standard output of the script (for example, from writeInfo) can be saved into a variable in R. If FALSE (the default) the output is logged to the console. |

Value

If the 'Praat' script returns standard output this is returned as a character vector. Also, if the script has instructions to create files, these will be created.

Examples

```
## Not run:
script <- system.file("extdata", "get-formants.praat", package = "speakr")

# Run get-formants.praat with argument "Hertz" and log to console.
praat_run(script, "Hertz")

# Run get-formants.praat with arguments and save in R variable.
library(readr)
formants <- praat_run(script, "Hertz", 0.03, capture = TRUE) %>%
  read_csv()

## End(Not run)
```

| | |
|-------------|-----------------------|
| start_praat | <i>Start 'Praat'.</i> |
|-------------|-----------------------|

Description

It opens the 'Praat' GUI.

Usage

```
start_praat()
```

Value

Nothing. Used for its side effects.

Examples

```
## Not run:  
# Open Praat GUI.  
start_praat()  
  
## End(Not run)
```

| | |
|-----------------------|----------------------------------|
| use_praat_plot_script | <i>Use Praat plotting script</i> |
|-----------------------|----------------------------------|

Description

This allows the user to save a copy of the Praat plotting script on disk so that they can make changes and customise the plot.

Usage

```
use_praat_plot_script(file, ...)
```

Arguments

| | |
|------|---|
| file | Path including file name to which the script is copied. |
| ... | Further arguments passed to file.copy . |

Value

Nothing. It is used for its side effects.

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