

# Package ‘speakr’

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**Type** Package

**Title** A Wrapper for the Phonetic Software 'Praat'

**Version** 3.2.4

**Date** 2024-12-07

**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** 7.3.2

**Imports** cli, ggplot2, lifecycle, quarto, readr, stringr, tibble

**Suggests** knitr, rmarkdown

**VignetteBuilder** knitr

**Language** en-US

**NeedsCompilation** no

**Author** Stefano Coretta [aut, cre] (<<https://orcid.org/0000-0001-9627-5532>>)

**Maintainer** Stefano Coretta <[stefano.coretta@gmail.com](mailto:stefano.coretta@gmail.com)>

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add_lmt	<i>Install the Literate Markdown Tangler extension</i>
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**Description**

It installs the Quarto extension Literate Markdown Tangler, which provides users with literate programming tools.

**Usage**

```
add_lmt()
```

**Value**

Nothing. Used for its side effects.

**Examples**

```
## Not run:  
add_lmt()  
  
## End(Not run)
```

---

praat_open	<i>Open files with 'Praat'.</i>
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**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 <code>writeInfo</code> ) 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

*Start 'Praat'.*

---

**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 *Use Praat plotting script*

---

**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 <a href="#">file.copy</a> .

**Value**

Nothing. It is used for its side effects.

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