

Plotting vowels in R

Kamil Kaźmierski

Adam Mickiewicz University, Poznań

This workshop is about plotting vowels in R. Data visualization is relevant for any type of data, including vowels. The tool of choice for data analysis and visualization in linguistics and beyond is R. Its ggplot2 package, a powerful data visualization tool, is introduced in another workshop at this conference. This workshop presents specific applications relying on ggplot2 as well, with a specific focus on vowels.

We'll look at various ways in which vowels can be visualized, including:

- a) individual vowel tokens (as points or IPA symbols),
- b) visual summaries of multiple vowel tokens (confidence ellipses and estimated vowel areas)
- c) formant trajectories (in spectrogram-like 'time by frequency' plots, as well as in F1 by F2 vowel charts)
- d) animations involving (b) and (c)

The workshop will consist of two parts. Part one will be a slide-show presentation with a Q&A session. R code for reproducing all the plots shown will be provided. Part two will be a handson session with practice tasks. For this practical part, a laptop computer with a working internet connection will be necessary (but no software besides an internet browser will be required: we will use R in the cloud). You can show up only for the first part or for both