

## Automated Speech Segmentation: Example of an African Language



Brigitte Bigi brigitte.bigi@1p1-aix.fr

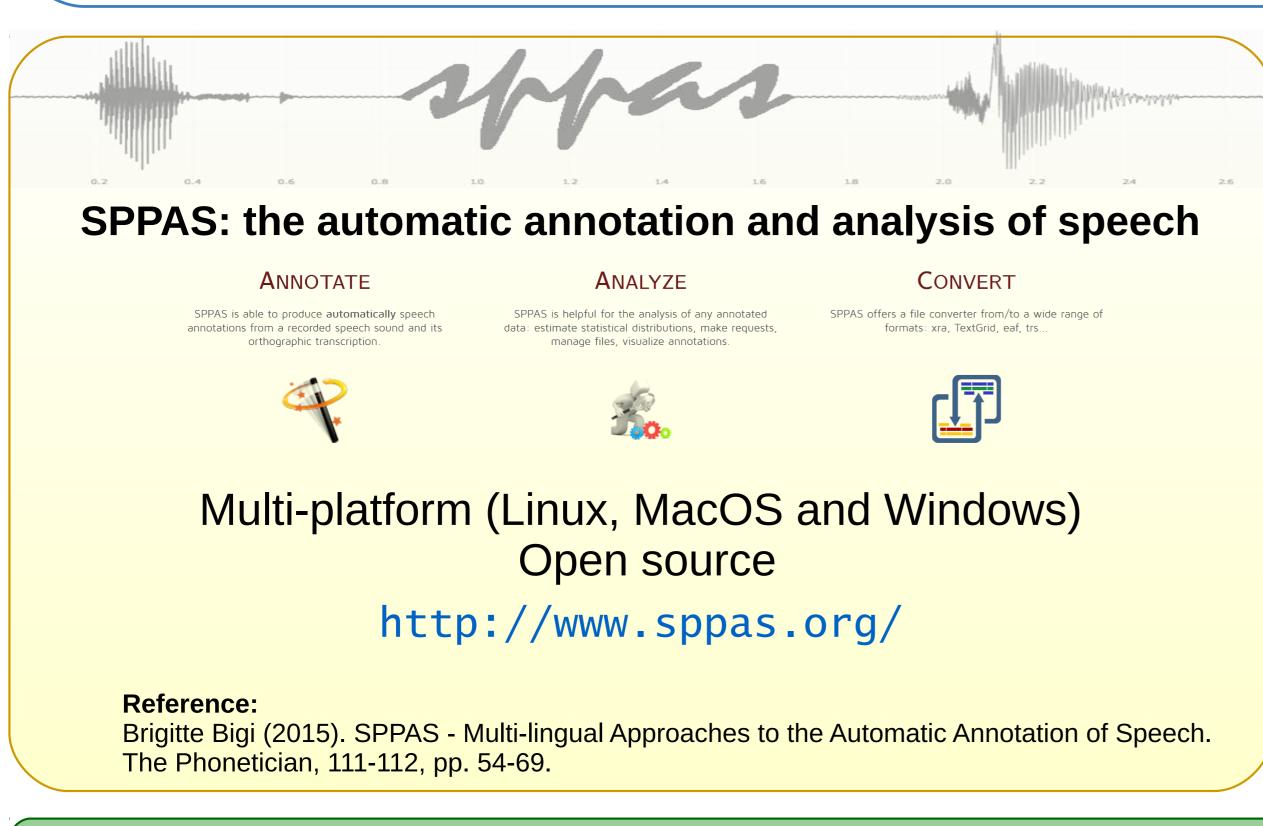
Speech segmentation is the process of identifying boundaries between speech units in the speech signal and determining where in time they occur.

Linguistic resources of the target language should be defined:

- a lexicon (the words to be recognized),
- a word dictionary (their pronunciations as a sequence of phonemes),
- an acoustic model (a stochastic representation of input waveform patterns per phoneme).

SPPAS software tool implements language-and-task-independent algorithms. This multilingual approach was applied to the african language Naija (Nigerian pidgin).

We developed language resources for a tokenizer, an automatic speech system for predicting the pronunciation of the words and their segmentation.



Nigerian Pidgin English: Naija

Post-creole L1: 5 million people L2: 70 million people

NaijaSynCor project:
A Corpus-based Macro-Syntactic Study of Naija http://naijasyncor.huma-num.fr

## Reference:

Brigitte Bigi, Bernard Caron, Oyelere S. Abiola (2017). Developing Resources for Automated Speech Processing of the African Language Naija (Nigerian Pidgin) LTC, pages 441-445, Poznan (Poland).

