**Global Acoustic Analysis Workflow**

**Ann Bradlow 2023**

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| **Step** | **Praat script or process name** | **Output** |
| 1 | syllableNuclei\_plus\_f0.praat | * \_DJW.Textrgrid for each .wav file with 2 tiers:  1. Syllables: Point tier with acoustic syllable peaks 2. Silences: Interval tier with “sounding” and “silent” intervals  * .txt file with 10 parameters:   Basic DJW parameters:   1. nsyll, 2. npause, 3. dur(s), 4. phonationtime(s), 5. speechRate(nsyll/dur), 6. articRate(nsyll/phonationtime), 7. ASD(speakingtime/nsyll)   Added F0 parameters   1. F0 mean(Hz) 2. F0 standard deviation(Hz) 3. F0 coefficient of variation |
| 2 | concatenate-wav-and-textgrid-files.praat | * Concatenates all .wav and .TextGrid files in by\_talker subdirectories * Resamples to 22050 Hz if needed (all files must have same SR) * \_DJW. TextGrids must already exist * Concatenated TextGrids have 3 tiers:  1. Labels: individual sentence file names 2. Syllables: Point tier with acoustic syllable peaks 3. Silences: Interval tier with “sounding” and “silent” intervals |
| 3 | vowel-dispersion-from-DJW-peaks | * Gets 2 DJW parameters +vowel dispersion(Bark) * Runs on concatenated files so that dispersion is calculated from overall centroid in the F1xF2 space * .txt file with 3 parameters: nsyll, npause, vowel dispersion |

Note:

syllableNuclei\_plus\_f0.praat

* Original version: Copyright (C) 2008 Nivja de Jong and Ton Wempe
* Modified 2010.09.17 by Hugo Quené, Ingrid Persoon, & Nivja de Jong
* Modified further in 2019 and 2020 by Ann Bradlow and Chun Liang-Chan
* Modified again in 2023 by Ann Bradlow