

Measuring intonation: Theoretical and practical issues

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The ability to make acoustic measurements is of increasing importance in phonetic research, e.g., in order to work out and quantify the fine phonetic detail of sound-pattern differences or to complement auditory analysis or perception experiments. There are plenty of freeware tools available nowadays and enable basically anyone to take acoustic measurements of and within speech signals. Yet, firstly, the easy access to software tools does not mean that taking and identifying valid measurements is a trivial task; and, secondly, measuring intonation has no scientific value without the additional ability to evaluate and interpret the obtained measurements.

It is this basic know-how that my (online) seminar aims at, with PRAAT as the primary software tool. The seminar is organized in 4 blocks of 90 minutes.

We will start in block 1 with the theoretical background about how PRAAT calculates f_0 and intensity from the speech signal, and what this means in terms of settings and potential pitfalls. Block 2 will then be about scripts for prosodic measurements that are out there and how to apply them to sound files. The first two blocks are concluded by a little (homework) exercise in which the participants will take and compare automatic and manual measurements (of f_0 , intensity, and duration... and, depending on time, also of basic voice-quality parameters).

Block 3 will begin with participants reporting about and reflecting upon the measuring exercise - and, on this basis, continue with providing basic know-how about the interpretation of these measurements, e.g., against the background of just noticeable differences and detection thresholds of human listeners or the relevant (i.e. meaningful) dimensions of prosodic variation. The final 90 minutes of block 4 are then reserved for a joint wrap-up and an interactive Q&A session.

The program at a glance

- Day 1: Tuesday, 29 September 2020
 - Block 1: Measuring intonation: The underlying mechanisms. 10.00-11.30
 - Block 2: Measuring intonation automatically and manually. 11.45-13.15
- Day 2: Wednesday, 07 October 2020
 - Block 3: Evaluating and interpreting intonational measurements. 10.00-11.30
 - Block 4: Wrap-up and Q&A session (for both theoretical and practical questions). 11.45-13.15