

Supplemental Material S2: Voice maps and electoglottographic wave shapes for all participants from the voice range profile task on vowel /a/. For all participants, the voice range profile (VRP) was obtained on the vowel /a/. The participants were 13 adult males, 13 adult females, 11 girls and 9 boys. Each page shows the data for one participant.

A cell is included here if at least five electrolottography (EGG) cycles occurred in it. The maps show the Cell-Mean of the given EGG parameter on a color scale. The **black grid** shows the participant's gamma (Γ) region which was derived from the participant's SRP, and is taken to define the most representative core of the habitual *speech* range.

The six panels starting from top left to right (1-3) and bottom left to right (4-6) on each page show the following:

1. The Cell-Mean of the quotient of contact by integration Q_{ci} , a measure of the relative amount of contacting.
2. The Cell-Mean of the normalized peak dEGG amplitude quotient Q_{Δ} , a measure of the maximum rate of change in contact area over a cycle. Its minimum is 1, corresponding to a sinusoidal EGG.
3. The Cell-Means of the quotient of speed by integration Q_{si} , a measure of the asymmetry of the contact phase. The value 1 represents a symmetrical contact phase, >1 means the pulse is skewed to the left.
4. The Cell-Means of the cycle-rate sample entropy CSE, a measure of the disorder in successive EGG wave shapes. The pale cyan color signifies that all cycles in the cell received the value zero; they were below the threshold of the Sample Entropy computation. This indicates very stable phonation.
5. The distribution of five EGG wave shapes as obtained by 5-way clustering of this participant's productions.
6. The EGG wave shapes corresponding to those five clusters, each a concatenation of 4 identical pulses for visual clarity. The EGG parameters are annotated on each wave shape as Q_{ci} , $/Q_{\Delta}$ and $\leftrightarrow Q_{si}$ where $/$ =slope and \leftrightarrow =asymmetry.

The dependent variables Q_{ci} -M, Q_{Δ} -M, Q_{si} -M and CSE-M for the vowel task are the means within the Γ region of the respective Cell-Means listed above. Similarly, the dependent variables Q_{ci} -SD, Q_{Δ} -SD and Q_{si} -SD for the vowel task are the means of the Cell-SDs (not shown here) of the VRP data within the Γ region.

The color scale tick values show how the Cell-Mean of the parameter is mapped to a color. For the Q_{Δ} and Q_{si} parameters, the tick spacing is logarithmic only to provide visual contrast.



























































































