# Supplemental data

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **cohort size** | **cohort reduction** | **phoneme surprisal** | **cohort entropy** |
| **cohort size** |  | -.81 | .02 | .73 |
| **cohort reduction** | -.81 |  | .07 | -.78 |
| **phoneme surprisal** | .02 | .07 |  | .19 |
| **cohort entropy** | .73 | -.78 | .19 |  |

Table S1: Predictor correlation at word onset: Pairwise correlation for phoneme-based predictor variables across all stimuli, restricted to the first phoneme of each word.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **cohort size** | **cohort reduction** | **phoneme surprisal** | **cohort entropy** |
| **cohort size** |  | .80 | .19 | .75 |
| **cohort reduction** | .80 |  | .48 | .57 |
| **phoneme surprisal** | .19 | .48 |  | .32 |
| **cohort entropy** | .75 | .57 | .32 |  |

Table S2: Predictor correlation within word: Pairwise correlation for phoneme-based predictor variables across all stimuli, restricted to all but the first phoneme of each word.

|  |  |  |
| --- | --- | --- |
|  | Left hemisphere | Right hemisphere |
| Effect | Right | Anterior | Superior | Right | Anterior | Superior |
| **Single speaker** |
| acoustic power | -59 | -9 | -3 |  62 | -10 | -3 |
| acoustic onset | -58 | -26 |  3 |  62 | -15 |  3 |
| word onset | -56 | -29 |  5 |  59 | -23 | -14 |
| cohort reduction |  – |  – |  – |  40 | -26 | 10 |
| phoneme surprisal | -65 | -31 |  5 |  – |  – |  – |
| cohort entropy | -55 | -30 | -12 |  49 | -24 | -3 |
| **Two speakers** |
| acoustic attended | -60 | -23 | -2 |  65 | -17 |  3 |
| acoustic unattended | -63 | -31 |  8 |  62 | -15 |  3 |
| lexical attended | -56 | -29 |  5 |  62 | -15 |  3 |
| lexical unattended |  – |  – |  – |  – |  – |  – |

Table S3: Peak coordinates for significant effects in Figures 2 and 3. For each significant effect, the location of maximum model improvement, compared to the appropriately shuffled model. Coordinates are given in as dipole locations on the FreeSurfer fsaverage brain, which corresponds to MNI305 space.