

Supplemental Material For:

*Phase synchronization varies systematically with linguistic structure composition*

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28 August 2019

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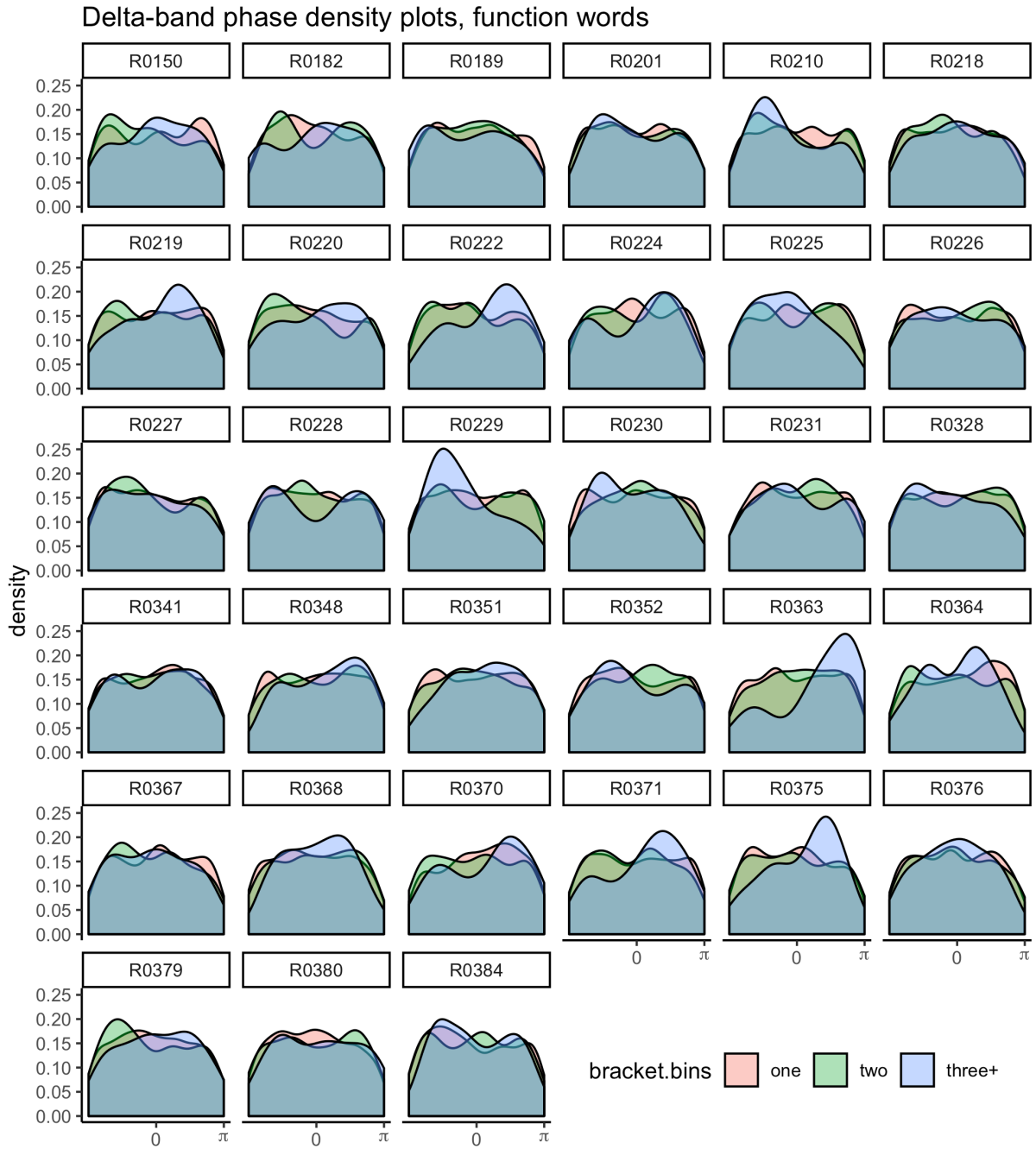
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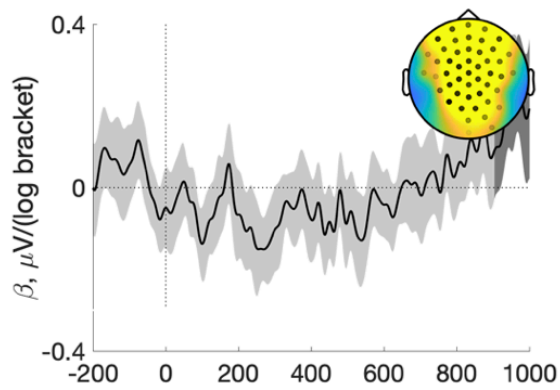
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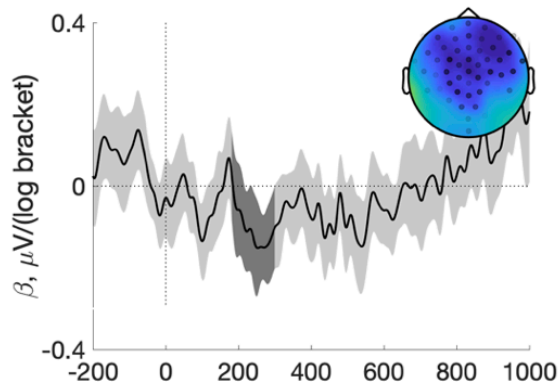
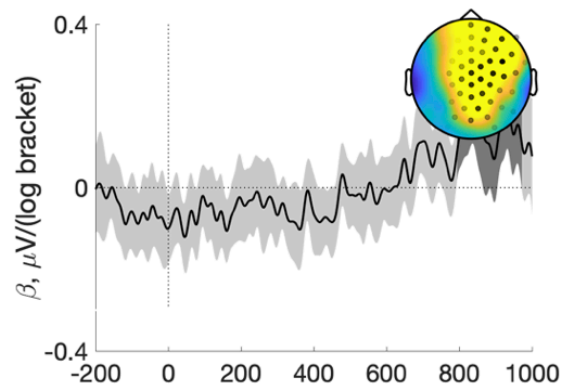


**Figure S1:** Density plots of delta-band phase for function words in individual participants. Numerous participants show increasingly unimodal distributions for three+ brackets (blue), but the peak phase differs across participants.

### A. Content Words



### B. Function Words



**Figure S2:** Regression Event-Related Potential (rERP) plots of spatio-temporal clusters that show a reliable log-scale effect of brackets on evoked EEG data from (A) content-words or (B) function words. In all panels, black traces and grey shading indicate the grand-averaged regression coefficient ( $\pm CI_{95\%}$ ) from electrodes contributing to that effect; insets show those electrodes along with a topographic plot of activity averaged across the cluster's time-window (dark-grey shading). The top plots for both content and function words show a reliable cluster of positive-going activity over central posterior-electrodes starting about 700-800 ms after word onset,  $p = 0.012$ ;  $p = 0.048$ , respectively; the bottom plot shows a reliable negative-going cluster over anterior electrodes starting around 200 ms only for content-words,  $p < 0.001$ .