Behavioural and EEG evidence for inter-individual variability in late encoding stages of word production: Supplementary material

ERP analyses

General interference

Results of mass univariate analysis, general interference effect with semantic list

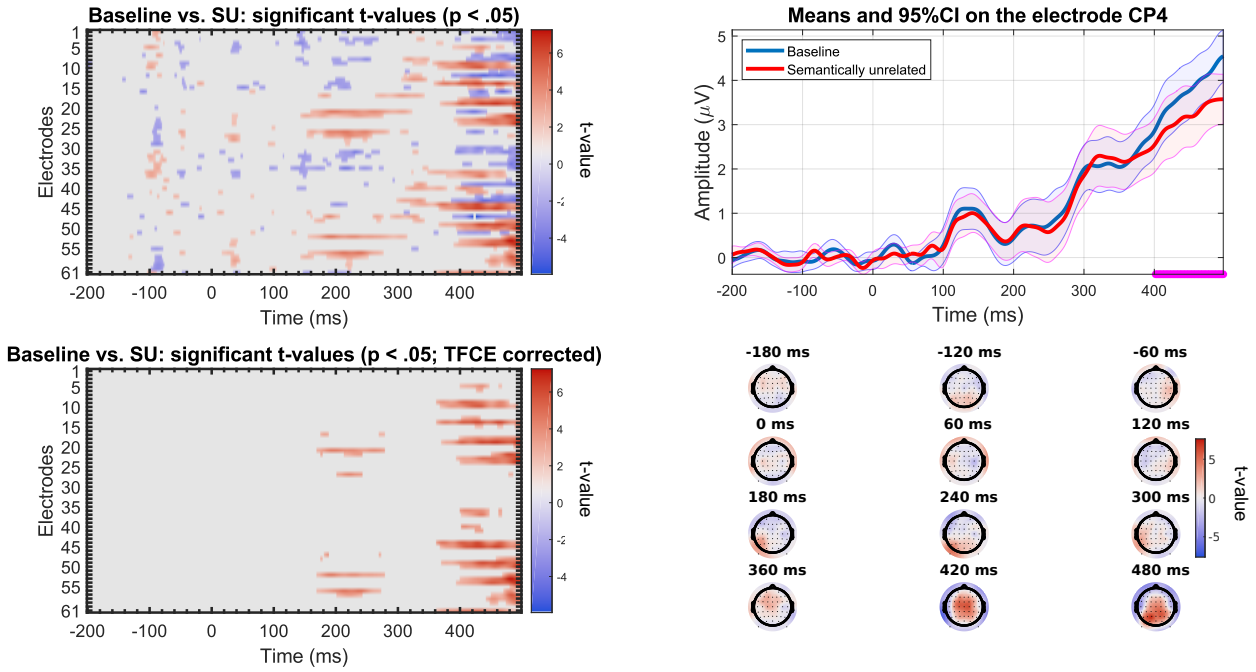

Figure 2: Results of mass univariate analysis for the comparison between the baseline condition and unrelated trials from the semantic list (SU) for the stimulus locked ERPs, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode CP4 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

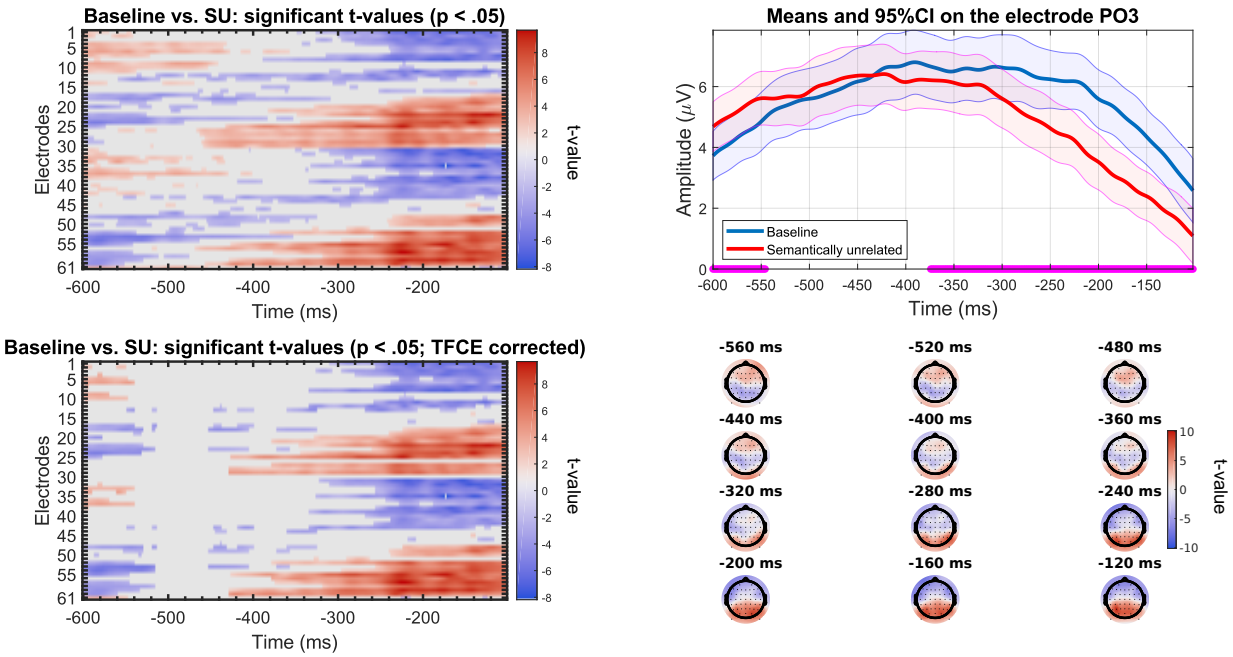

Figure 3. Results of mass univariate analysis for the comparison between the baseline condition and unrelated trials from the semantic list (SU) for the response-locked ERPs, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO3 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

Results of mass univariate analysis, general interference effect with phonological list

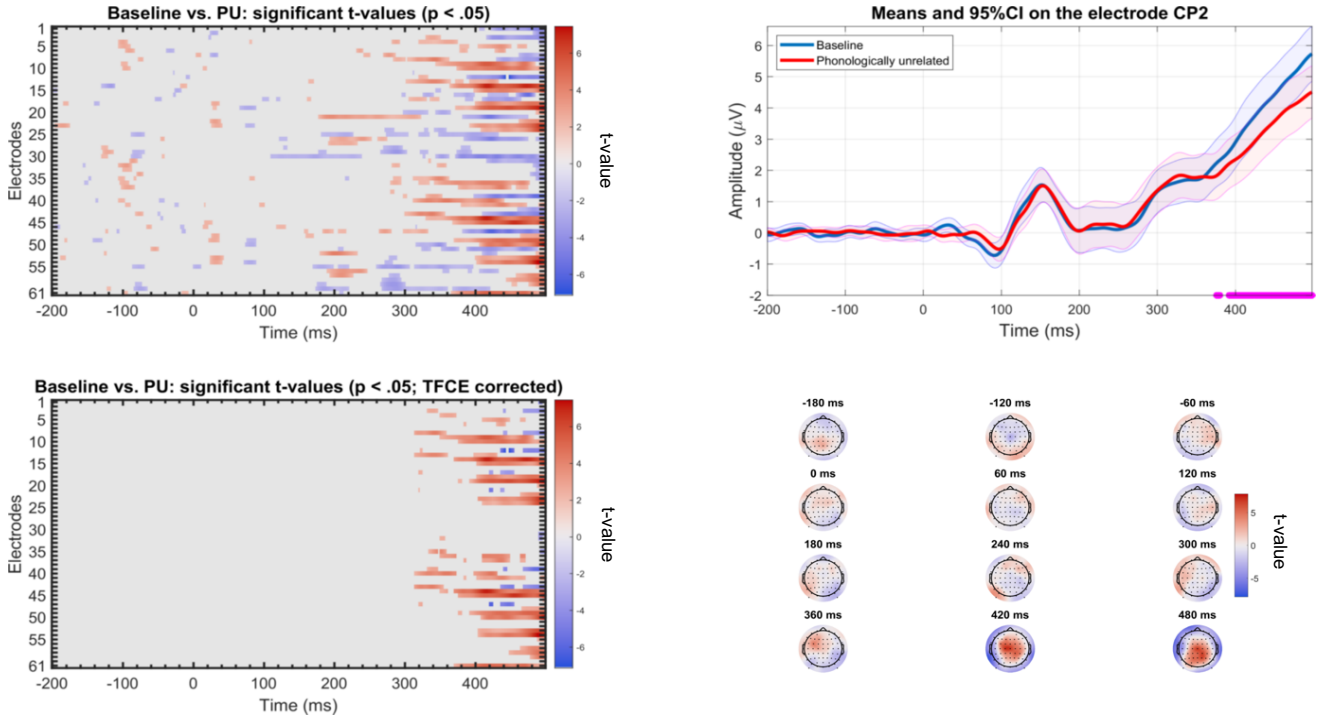

Figure 4: Results of the mass univariate analysis for the comparison between the baseline condition and phonologically unrelated (PU) trials for the stimulus-locked ERPs, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode CP2 (electrode where t-value is maximal) for the baseline condition and phonologically unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

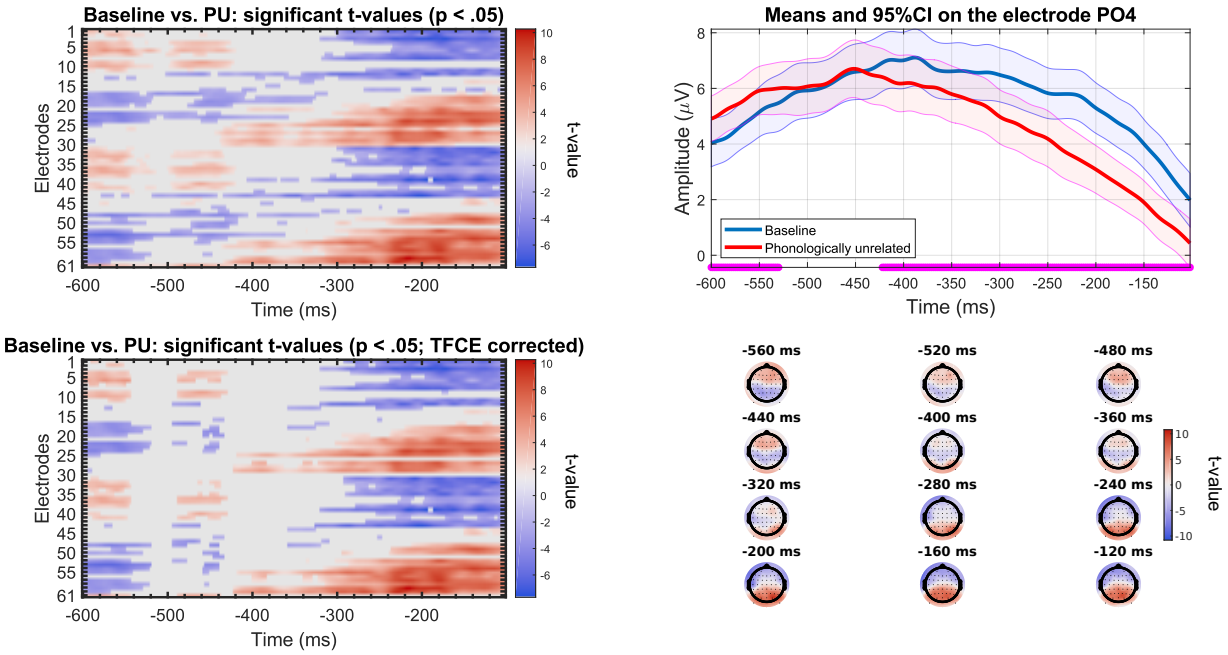

Figure 5. Results of the mass univariate analysis for the comparison between the baseline condition and phonologically unrelated (PU) trials for the response-locked ERPs, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO4 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

Results of mass univariate analysis, general interference effect with semantic list, grouped by slow and fast participants

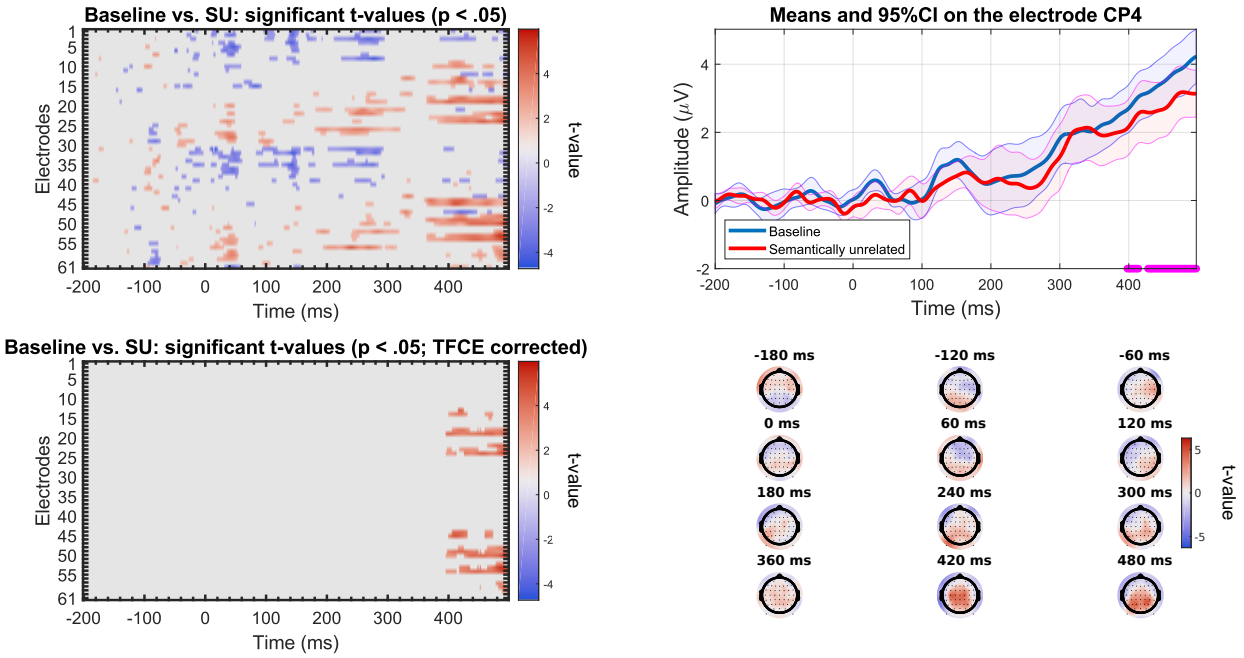

Figure 6: Results of mass univariate analysis for the comparison between the baseline condition and semantically unrelated (SU) trials for the stimulus-locked ERPs of slow participants, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode CP4 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

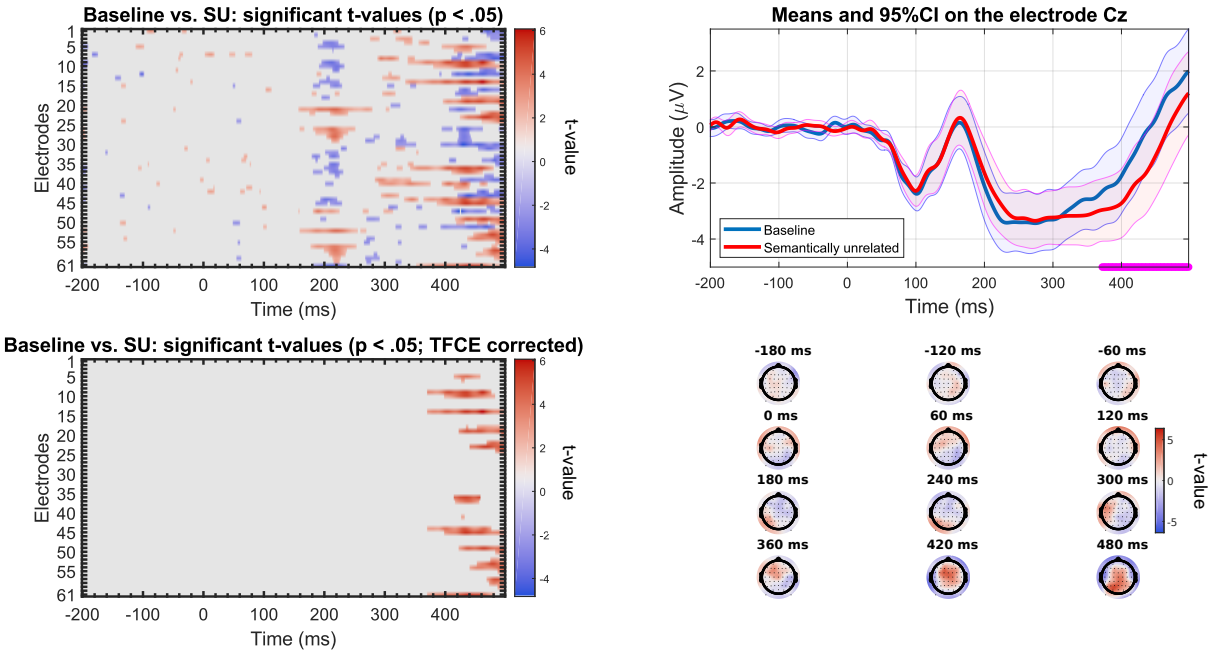

Figure 7: Results of mass univariate analysis for the comparison between the baseline condition and the semantically unrelated (SU) trials for the stimulus locked ERPs of fast participants, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode Cz (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

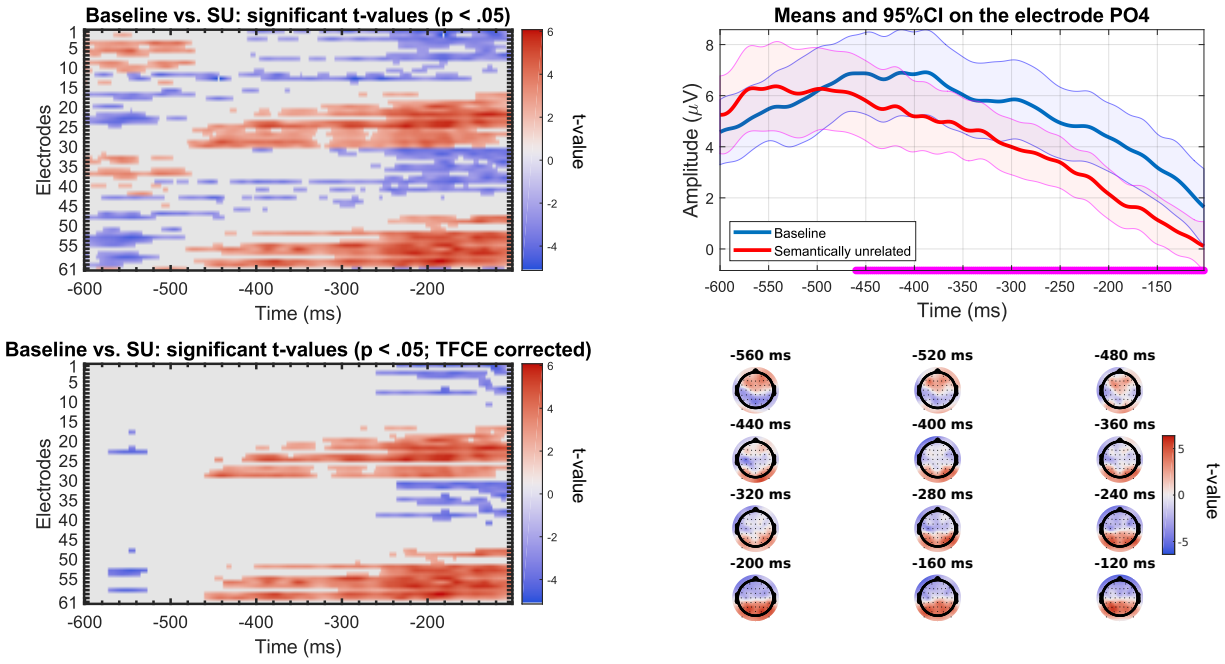

Figure 8: Results of mass univariate analysis for the comparison between the baseline condition and the semantically unrelated (SU) list for the response-locked ERPs of slow participants, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO4 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

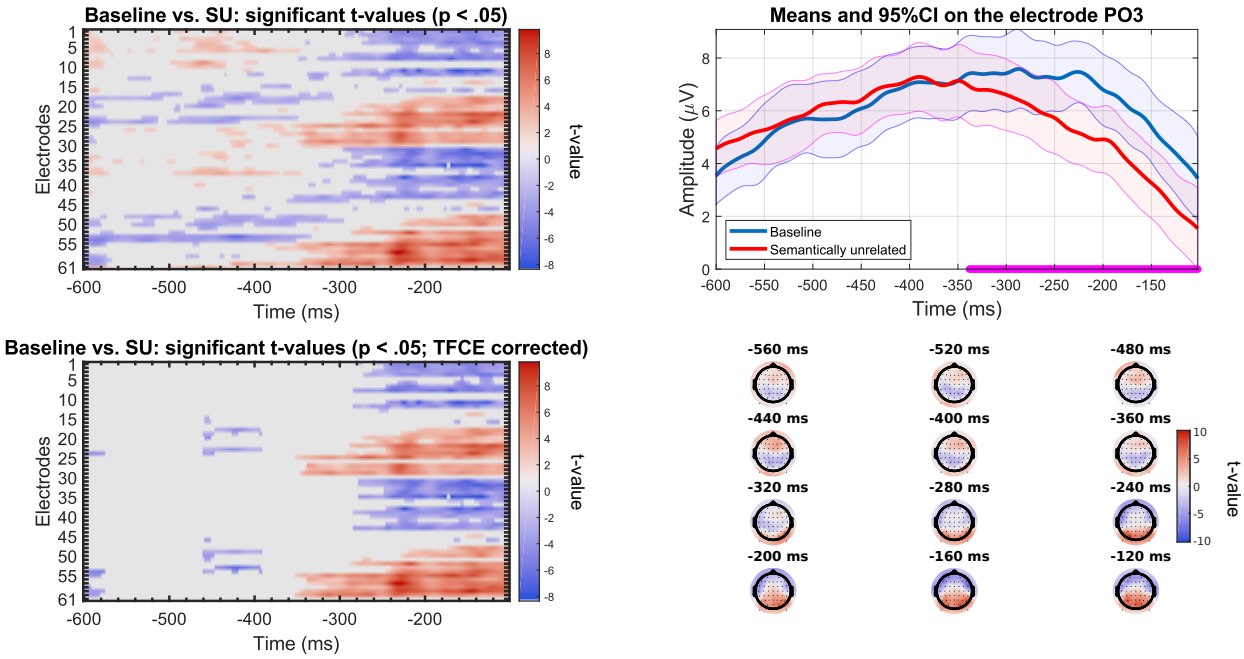

Figure 9: Results of mass univariate analysis for the comparison between the baseline condition and the semantically unrelated list (SU) for the response-locked ERPs of fast participants, with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO3 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

Results of mass univariate analysis, general interference effect with phonological list, grouped by slow and fast participants

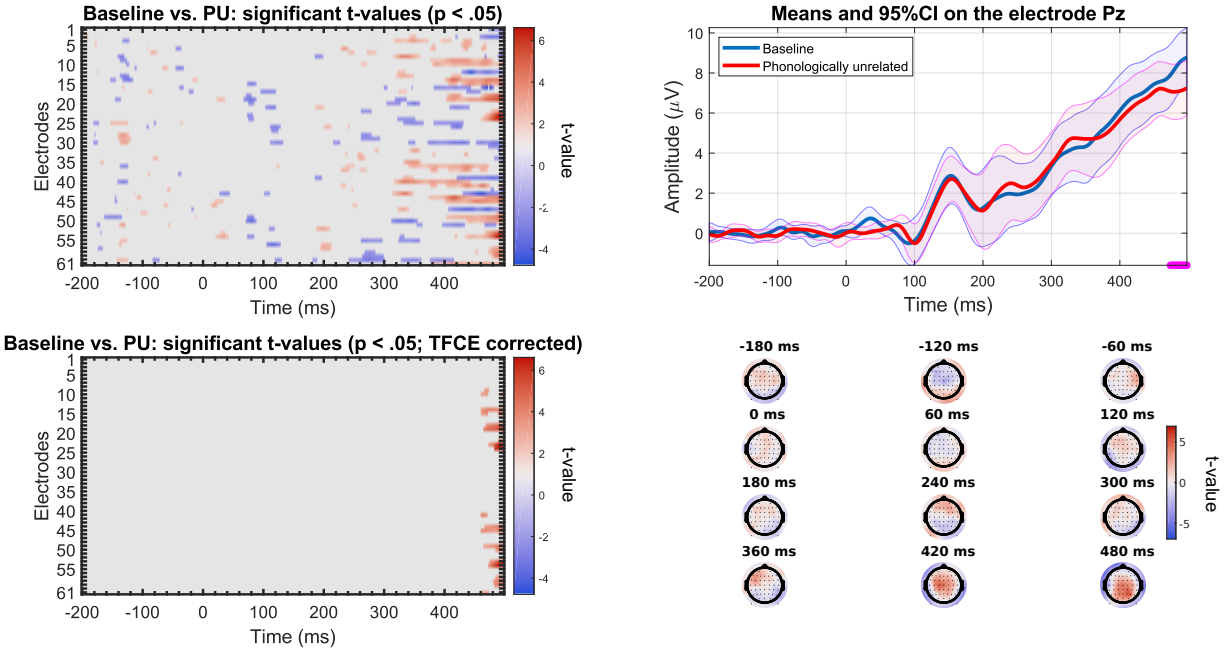

Figure 10. Results of mass univariate analysis for the comparison between baseline and unrelated trials (phonological list, PU) for the stimulus-locked ERPs in slow participants with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode CP6 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

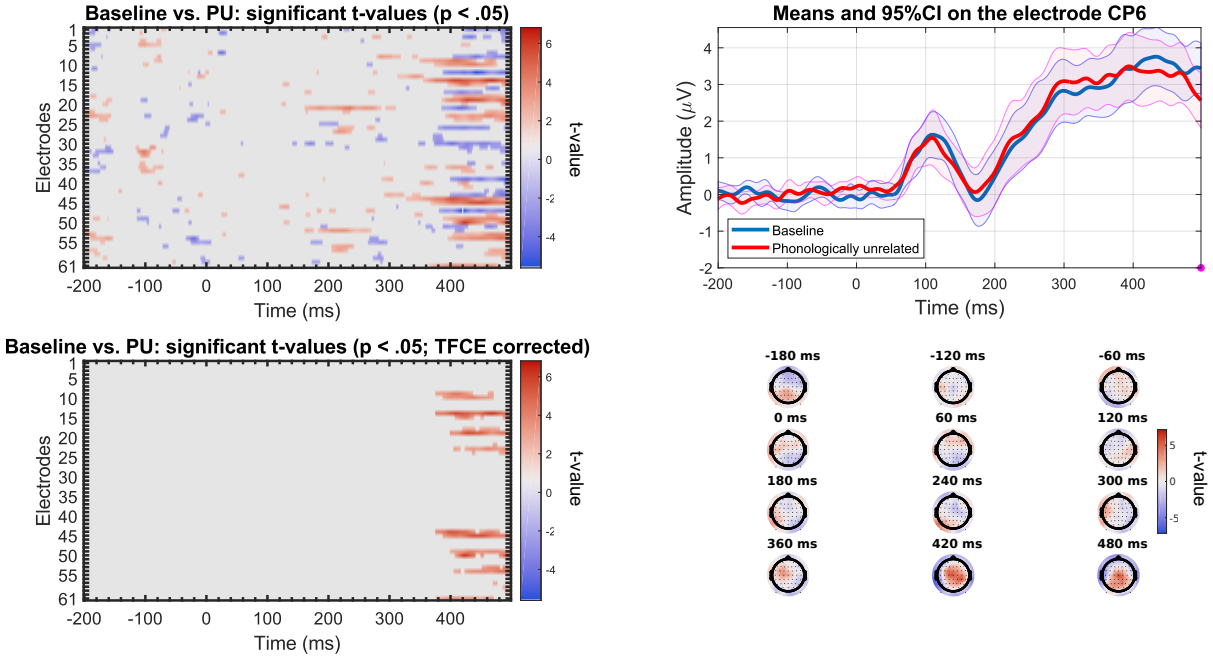

Figure 11. Results of mass univariate analysis for the comparison between baseline and unrelated trials (phonological list, PU) for the stimulus-locked ERPs in fast participants with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode CP6 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

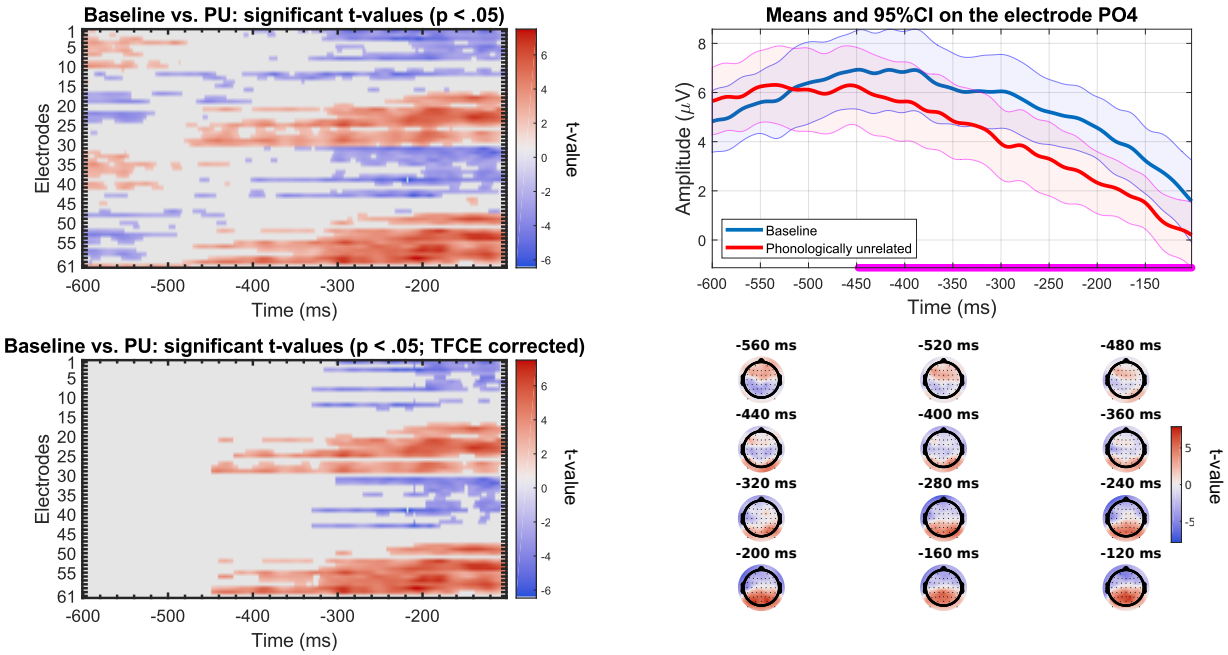

Figure 12. Results of mass univariate analysis for the comparison between baseline and unrelated trials (phonological list, PU) for the response-locked ERPs in slow participants with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO8 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).

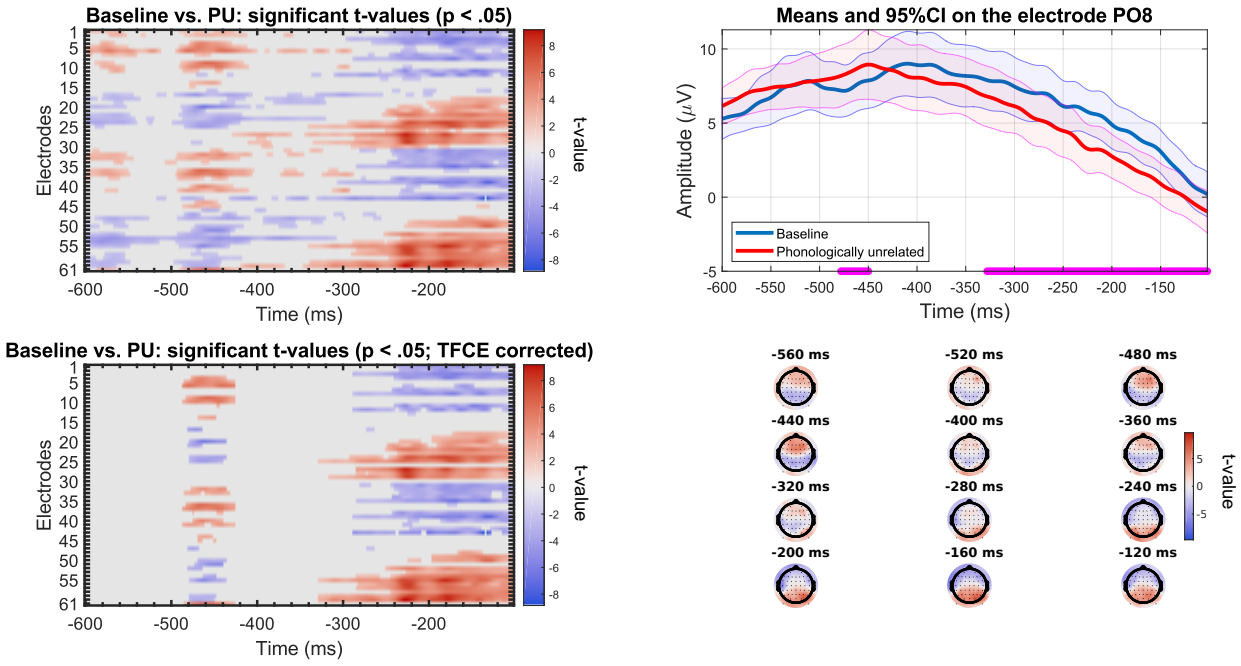

Figure 13. Results of mass univariate analysis for the comparison between baseline and unrelated trials (phonological list, PU) for the response-locked ERPs in fast participants with significant t-values before correction (top left); significant t-values after correction with TFCE (bottom left); mean amplitude at electrode PO8 (electrode where t-value is maximal) for the baseline condition and phonological unrelated trials, significant time points (after TFCE correction) underlined in purple (top right); Topographic map of t-values before correction (bottom right).