**APPENDIX A**

**Overall RT analysis of Experiments 1 and 2**

We created one overall dataset combining the data of both experiments. The factor Experiment was sum-coded for analysis (Experiment 1 = -1; Experiment 2 = 1). Table A1 shows that the overall effects observed in the separate experiments were confirmed by this analysis. No statistical differences between the two experiments were observed.

**Table A1.** Outcome of the linear mixed effects analysis performed on the RT data from the overall dataset combining Experiment 1 and Experiment 2.

Model: RT ~ OrthRel\*SemRel\*Experiment + (1+OrthRel\*SemRel|Subject) + (1|Item)

Estimate (SE) df *t* value  *p value*

(Intercept) -1.69 (0.02) 1.26e02 -69.99 <2e-16\*\*\*

OrthRel -1.83e-02 (0.01) 1.02e02 -1.49 0.14

SemRel -5.79e-02 (0.01) 1.04e02 -4.69 8.26e-06\*\*

Exp 1.91e-02 (0.02) 8.00e01 0.91 0.37

OrthRel\*SemRel -1.98e-02 (0.01) 9.95e01 -1.62 0.11

OrthRel\*Exp 3.78e-03 (0.00) 8.07e01 1.11 0.27

SemRel\*Exp -7.27e-03 (0.00) 8.25e01 -1.96 0.054

OrthRel\*SemRel\*Exp -8.38e-04 (0.00) 1.06e02 0.27 0.79

\* *p* < .05; \*\* *p* < .01; \*\*\* *p* < .001; Exp = experiment; OrthRel = orthographic relatedness; SemRel = semantic relatedness.

Follow-up analyses on condition pairs confirmed that, across experiments, cognates (*M* = 586 ms, *SD*  = 149) were responded to significantly faster (Est. = -0.04, *SE* = 0.02, *t* = -2.09, *p* = 0.04) than translations (*M* = 608 ms, *SD* = 132). A significant difference (Est. = -0.04, *SE* = 0.02, *t* = -2.51, *p* = 0.02) was also observed between translations (*M* = 608 ms, *SD* = 132) and unrelated prime-target pairs (*M* = 635 ms, *SD* = 135). Neighbors (*M* = 640 ms, *SD* = 152) led to numerically but not significantly (Est. = 0.002, *SE* = 0.02, *t* = 0.11, *p* = 0.92) slower responses compared to unrelated prime-target pairs.

In sum, this overall RT analysis across the two experiments suggests that the absence of an inhibition effect was not due to a lack of statistical power. This conclusion is further supported by an analysis that combines the present data with those for an additional 48 participants of a recent combined behavioral-EEG study that used the same stimuli and masked priming procedure (Peeters et al., 2022). This analysis for 116 participants did not yield a significant inhibitory orthographic relatedness effect (*p* = 0.11) and, more specifically, showed only an overall 4 ms difference between neighbor (M = 636 ms) and unrelated control (M= 632 ms) conditions.