APPENDIX S2

The following text reports an analysis on a combined RT/accuracy rate measure.

1. Analysis of combined RT/accuracy measure

In order to ensure that the higher error rates in the L2 group (a contrast commonly found in studies comparing L1 and L2 speakers) did not affect the pattern of priming effects that we obtained, a reviewer proposed a combined RT and accuracy analysis (see, e.g., Bruyer & Brysbaert, 2011).

Here, we report an analysis of L2 responses using a combined by-participant RT/accuracy adjustment. In order to calculate this measure, each RT was divided by the accuracy rate of the participant who provided the response. Because the adjustment produced a very skewed distribution (even more so than a normal RT distribution), the data was reciprocally transformed (i.e., -1000/(RT/accuracy)). The (back-transformed) means of the combined measure in each condition are shown in Table S1 below.

Table S1: Means (back-transformed) of the combined RT/accuracy measure

	Unrelated	Paal	Piel
1sg Past	812	814	806
Infinitive	816	798	792

As the means in Table S1 indicate, we found parallel results to the ones reported in the paper. In the Infinitive condition, RTs following both Paal primes (t=-2.12, p=.035) and Piel primes (t=-2.08, p=.038) were shorter than following Unrelated primes. In the 1sg Past condition, no priming was obtained for either Paal primes (t=0.66, p=.507) or Piel primes (t=0.23, p=.822). The interaction of Prime Type and Form Type was significant for Paal priming (t=1.96, p=.050), but failed to reach statistical significance for Piel priming (t=1.62, p=.105).

Given the same pattern of priming for both Prime Types (Paal and Piel) in the Infinitive condition, as well as the absence of priming for either Prime Type in the 1sg Past condition, we conclude that the pattern of effects that we report in the main manuscript is robust to participant's error rates.

References

Bruyer, R., & Brysbaert, M. (2011). Combining speed and accuracy in cognitive psychology: Is the inverse efficiency score (IES) a better dependent variable than the mean reaction time (RT) and the percentage of errors (PE)? *Psychologica Belgica*, *51*, 5–13.