Variable description Recall\_data.txt

This file contains the raw data from the meaning recall task in long format.

**participant**: participant ID number.

**list**: list number for Welsh stimuli.

**Welsh**: Welsh word.

**English**: English translation (not shown to participant in this task).

**WordType**: Whether the Welsh word was from the incidental or explicit learning task.

**Picture**: name of the picture file (not shown to participants in this task).

**itemNumber**: item number for the Welsh word.

**Sound**: name of the sound file played to participant.

**keyPressed**: participant’s answer on this trial as typed.

**Accuracy\_asTyped**: whether PsychoPy classed this as a correct (1) or incorrect (0) answer.

**Accuracy\_corrected:** whether the researcher corrected the accuracy information (1 = yes) due to spelling error or synonym.

**Accuracy\_recalculated**: final accuracy value used for the analysis correct (1) or incorrect (0).

Variable description Predictors\_data.txt

This file contains the individual differences data in short format (one row per participant)

**participant**: participant ID number.

**age**: age in years.

**gender**: 1 = male; 2 = female.

**inc\_accuracy**: mean accuracy on the letter-search task.

**VSTM**: mean accuracy on the verbal short-term memory task.

**SSTM**: mean accuracy on the visuo-spatial short-term memory task.

**phono\_F2**: mean accuracy on the phonological abilities task for the non-speech continuum.

**phono\_L1**: mean accuracy on the phonological abilities task for the native language continuum.

**phono\_FL**: mean accuracy on the phonological abilities task for the foreign language continuum.

**VWM\_accuracy**: mean accuracy on the verbal working memory task.

**VWM\_FM\_accuracy**: mean accuracy on the face-matching element of the verbal working memory task.

**SWM**: mean accuracy on the visuo-spatial working memory task

**SWM\_FM\_accuracy**: mean accuracy on the face-matching element of the visuo-spatial working memory task.

**vocab\_test**: total score on the native language vocabulary test.

**ZVSTM**: z-transformed score for the verbal short-term memory task.

**ZSSTM**: z-transformed score for the visuo-spatial short-term memory task.

**Zphono\_F2**: z-transformed score for the phonological abilities task for the non-speech continuum.

**Zphono\_L1**: z-transformed score for the phonological abilities task for the native language continuum.

**Zphono\_FL**: z-transformed score for the phonological abilities task for the foreign language continuum.

**ZVWM\_accuracy**: z-transformed score for the verbal working memory task.

**ZSWM**: z-transformed score for the visuo-spatial working memory task.

**memory**: composite memory score (mean of **ZVSTM, ZSSTM, ZVWM\_accuracy** and **ZSWM)**.

**phono**: composite phonological abilities score (mean of **Zphono\_F2, Zphono\_L1,** and **Zphono\_FL)**.

vocab\_Corr: raw scores on the native language vocabulary test.

ZRE\_vocab\_corr: z-transformed residuals for the native language vocabulary test (resulting from a regression with vocab\_Corr as outcome and **VSTM, SSTM, SWM, VWM\_accuracy,** and **phono\_F2** as predictors).

Variable description Ortho\_output.txt

This file contains the orthographic judgment data in short format (one row per item).

**itemNumber**: item number for each Welsh word.

**Ortho\_estimate**: z-score estimate of the probability that this item would win against another item based on its orthographic familiarity. Negative numbers indicate low values of familiarity.

**Ortho\_se**: standard error of the estimates.

Variable description Phono\_output.txt

This file contains the phonological judgment data in short format (one row per item).

**itemNumber**: item number for each Welsh word.

**Phono\_estimate**: z-score estimate of the probability that this item would win against another item based on its phonological familiarity. Negative numbers indicate low values of familiarity.

**Phono\_se**: standard error of the estimates.