

## Legends for Supplementary Figures and Tables

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Supplementary Figure 1 – WAB-AQ results. VLSM results are shown in the top row and CLSM results in the middle row (network diagram) and bottom row (white matter tractography pathways traversed by the connectome links). Only statistically significant results after correction for multiple comparisons are shown. The scale bars indicate Z scores.

Supplementary Figure 2 – Word comprehension results without controlling for other variables. VLSM results are shown in the top row and CLSM results in the middle and bottom rows.

Supplementary Table 1 – The regions of interest (region of interest) used in this study were obtained from the John's Hopkins University (JHU) atlas.

Supplementary Table 2 – Language specific and domain general regions of interest (region of interest) included in this study. Connectome lesion symptom mapping (CLSM) evaluated a network composed of all possible connections between these regions. The region of interest# indicate the coding number for each region of interest in the JHU Atlas.

Supplementary Table 3 – Behavioural scores and percent of damage across domain general and language specific regions of interest.

Supplementary Table 4 – VLSM results for WAB-AQ;  $P < 0.050$  permutation correction:  $z < -4.46$ ,  $z > 3.66$ . These are regions whose lesion was associated with lower WAB-AQ. region of interest based results are shown on the left table (A), whereas the centers of the clusters with higher statistical association are shown on the right (B).

Supplementary Table 5 – VLSM results for word comprehension;  $P < 0.050$  permutation correction:  $z < -5.26$   $z > 3.19$ . These are regions whose lesion was associated with lower word comprehension. region of interest based results are shown on the left (A), whereas the centers of the clusters with higher statistical association are shown on the right (B).

Supplementary Table 6 – VLSM results for word comprehension controlling for object recognition;  $P < 0.050$  permutation correction:  $z < -5.26$   $z > 3.19$ . These are regions whose lesion was associated with lower word comprehension. region of interest based results are shown on the left (A), whereas the centers of the clusters with higher statistical association are shown on the right (B).

Supplementary Table 7 – CLSM results demonstrating connectome connections whose lower link weight was associated with lower WAB-AQ;  $P < 0.050$  permutation correction:  $z < -3.32$   $z > 2.65$ .

Supplementary Table 8 – A) CLSM results demonstrating connectome connections whose lower link weight was associated with lower word comprehension:  $P < 0.050$  permutation correction:  $z < -4.08$   $z > 2.32$ .  
B) CLSM results demonstrating connectome connections whose lower link weight was associated with worse word comprehension not controlling for object recognition (including only the 43 subjects with PPTT scores) :  $P < 0.050$  permutation correction:  $z < -3.97$   $z > 2.28$ ).

Supplementary Table 9 – CLSM results demonstrating connectome connections whose lower link weight was associated with lower word comprehension controlling for object recognition:  $P < 0.050$  permutation correction:  $z < -3.52$   $z > 2.75$ .

Supplementary Table 10 – Using the virtual analytic engine Neurosynth, the following functional MRI studies were associated with semantic knowledge. The statistical maps described in these studies were pooled for a meta-analytic analysis of brain regions activated during semantic processing, as shown in Figure 4.

Supplementary Table 11 – Similarly, using Neurosynth, the following functional MRI studies were associated with word comprehension and the pooled statistical map is shown in Figure 4.