

Supplemental materials for: High-order cognition is supported
by information-rich but compressible brain activity patterns

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March 2, 2023

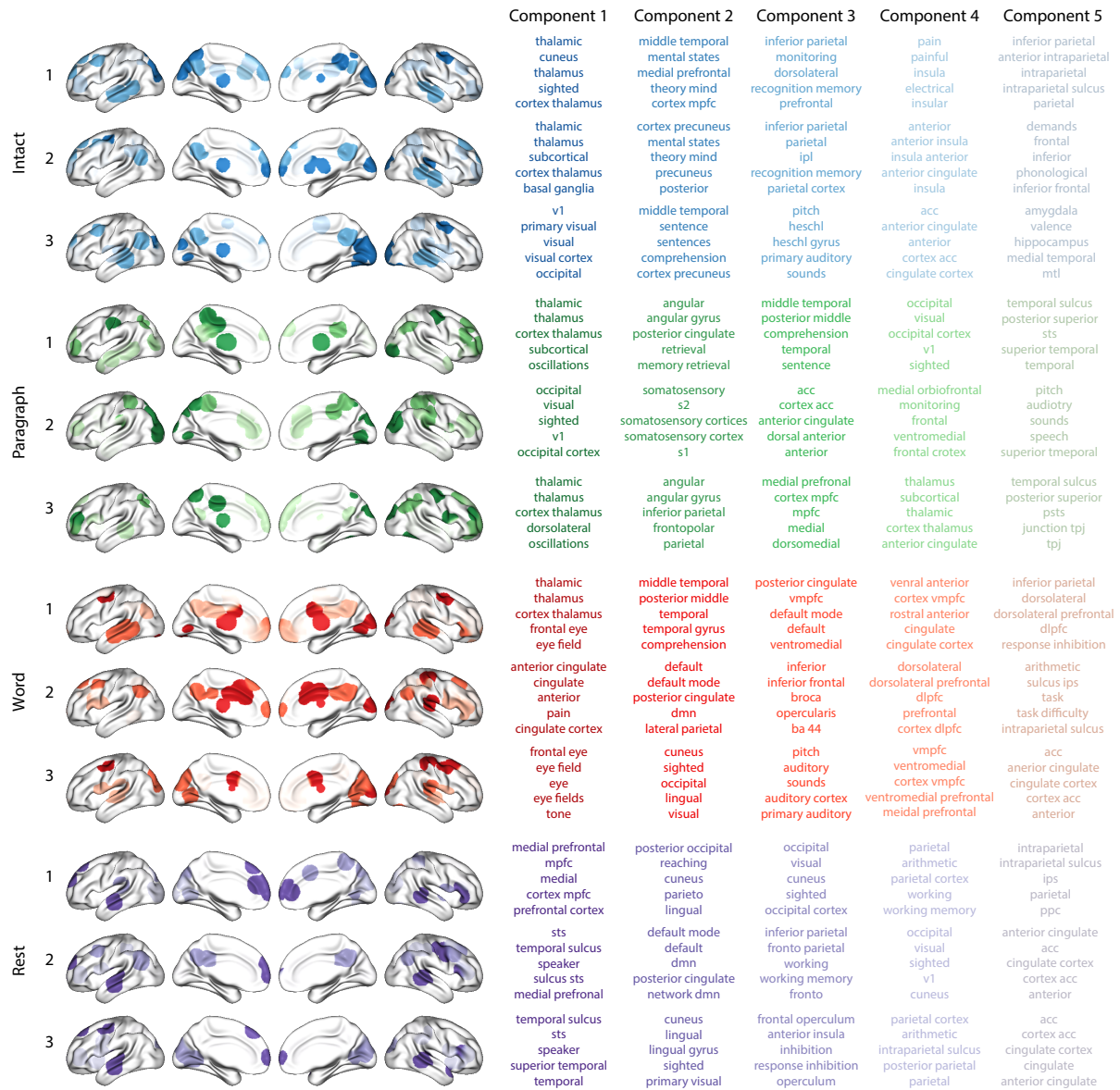


Figure S1: **Top terms associated with the highest-weighted components by condition, broken down by story segment.** Each group of three rows corresponds to an experimental condition, and the colors correspond to the component number (ranked by proportion of variance explained). The rows' numbering denotes the story segment used to compute each map (1: first third; 2: second third; 3: third third). The inflated brain plots display the top 20 highest-weighted hubs (see *Topographic Factor Analysis*) for each components. The lists on the right display the top five Neurosynth terms (Rubin et al., 2017) decoded from each components' brain map. Analogous maps computed for the entire story may be found in Figure 1.

5 **Supplemental references**

- 6 Rubin, T. N., Kyejo, O., Gorgolewski, K. J., Jones, M. N., Poldrack, R. A., & Yarkoni, T. (2017). Decoding
7 brain activity using a large-scale probabilistic functional-anatomical atlas of human cognition. *PLoS*
8 *Computational Biology*, 13(10), e1005649.