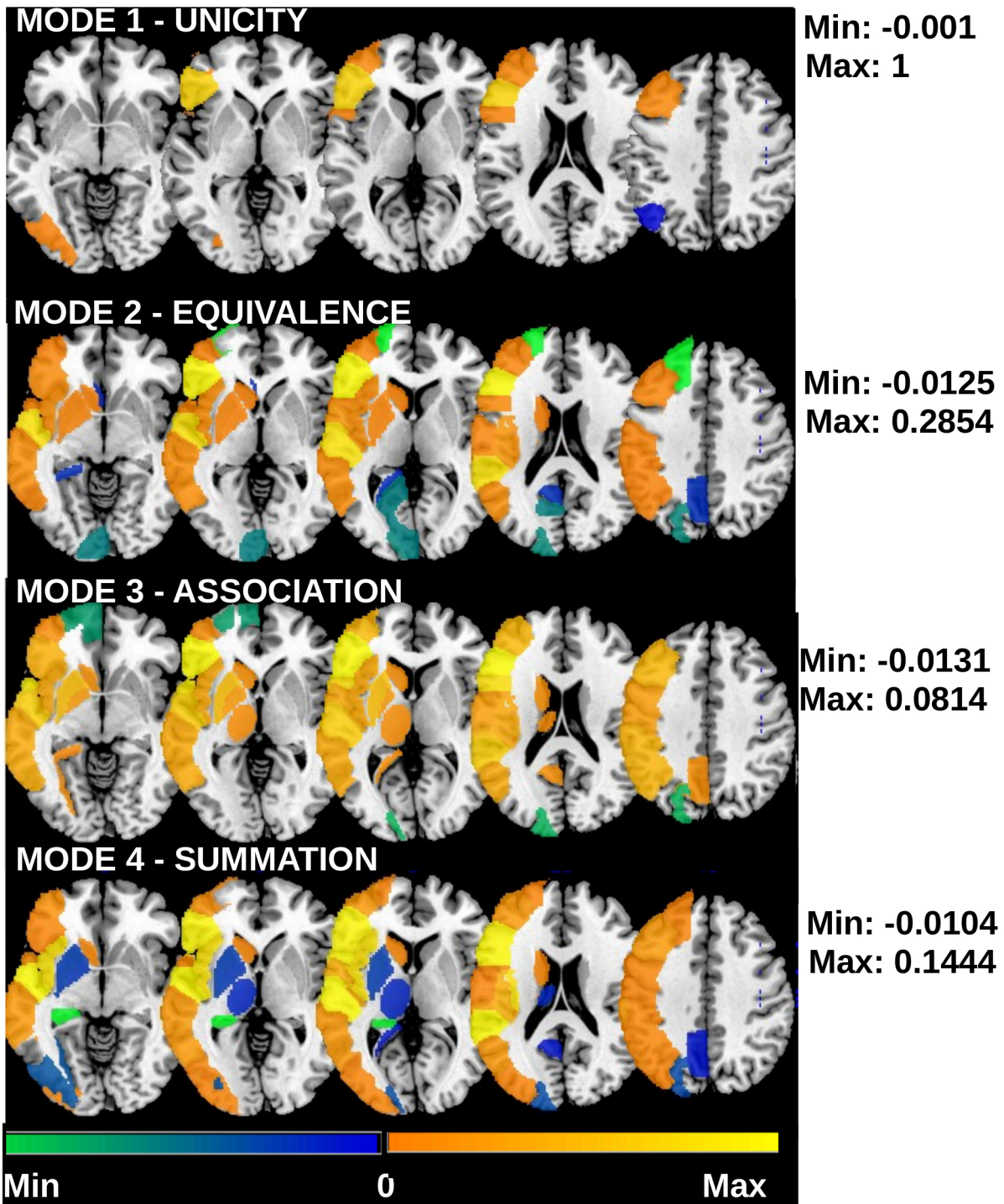


Supplementary Figure 1. Multivariate lesion inference by MSA and reduction of noise help reducing mis-inferences of false negative contributions in the human brain. The figure summarizes the findings of a formal re-analysis of the example proposed by Sperber and Karnath (their Fig. 1) with the help of the estimated Multiperturbation Shapley value Analysis inference approach (MSA; Keinan et al., 2006). (A) Reanalysis of the data as provided by Sperber and Karnath (their Fig. 1) with MSA reduces the mis-inference of false negative contributions. Note particularly the much reduced range of negative values compared to Sperber and Karnath (their Fig. 1). As also employed by Sperber and Karnath, this simulation includes 30% noise in addition to 70% signal. (B) Re-analysis with MSA of the same data without noise (only signal) further reduces the mis-inference of negative contributions. Moreover, the regions which were *a priori* defined to make functional contributions are clearly apparent by their maximum positive contributions in all brain modes, with the potential exception of ‘association’.

A



B

