**Figure S1. Within-category neuro-conceptual similarity.**
Time–course of group-level correlations between Conceptual Similarity Ratings and MEG-based RDMs after controlling for object-category: Pictorial presentation controlled for categorical similarity (red), Controlling for category was accomplished by partialling out category with an RDM composed of 0s (same-category) and 1s (different-category) from the semantic similarity RDM. Controlling for category similarity has different effects on Picture and Word modalities. While pictures representations, even when visual features are controlled (contVis), seem to extend beyond object-category for the whole investigated time window (100-600 msec), word stimuli clearly elicit such representations only in later time windows, from 405-460 msec and 485-540 msec.
Asterisks mark significant time points. Darker shaded areas show the standard error of the mean, lighter shaded areas the 95% confidence interval.
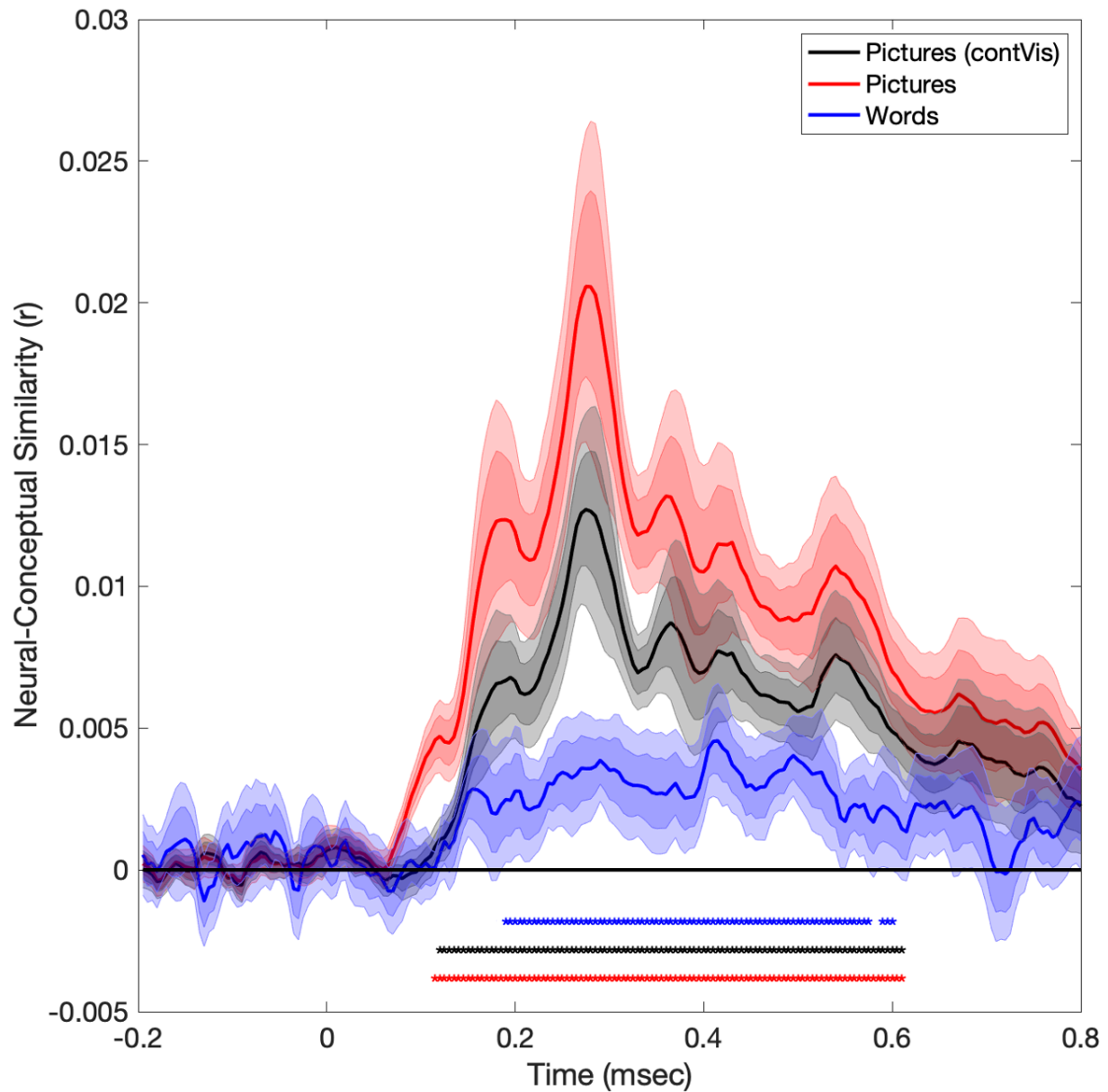
Figure S2. Word Embedding RSA. A word-vector space constructed RDM (word2vec trained on Italian Wikipedia, Berardi, 2015) explained MEG representational spaces for a continuous period from 190-580 msec in the Word modality. However, no significant differences are observed when comparing the RSA time courses between this analysis and the RSA employing the behavioural similarity ratings presented in figure 2 (all time points p > 0.05).
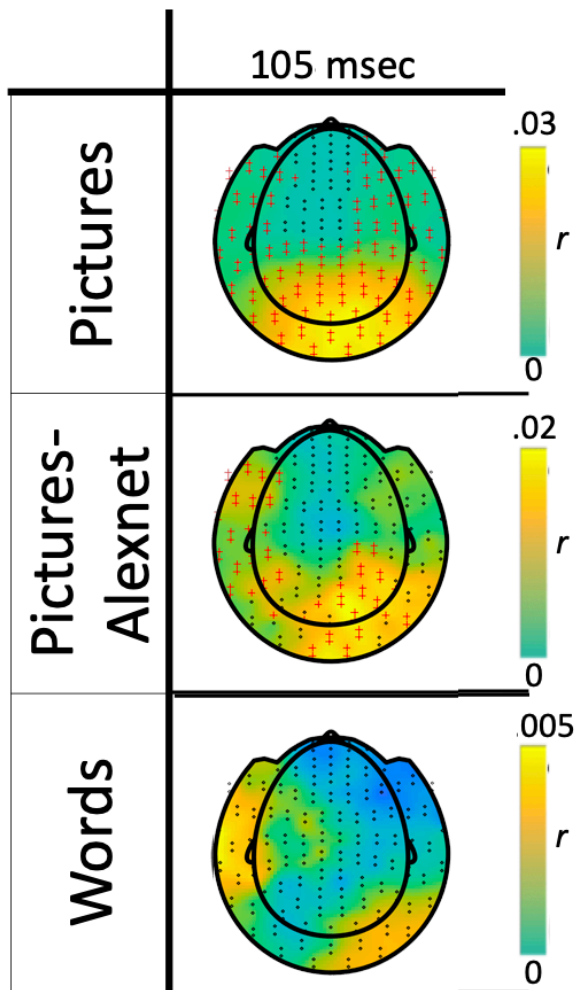
Figure S3. First informational content peak. As a control of the effectiveness of our visual model, we repeated the searchlight analysis on the first informational content peak observed at 105 msec. At this time-point, localized representations of objects are present at occipital, parietal and temporal sensor locations. Controlling for visual features using AlexNet reduces this distribution to medial/right posterior locations and left temporal locations with a topography that is comparable to the Word modality.