

Supplementary Figures

Figure S1

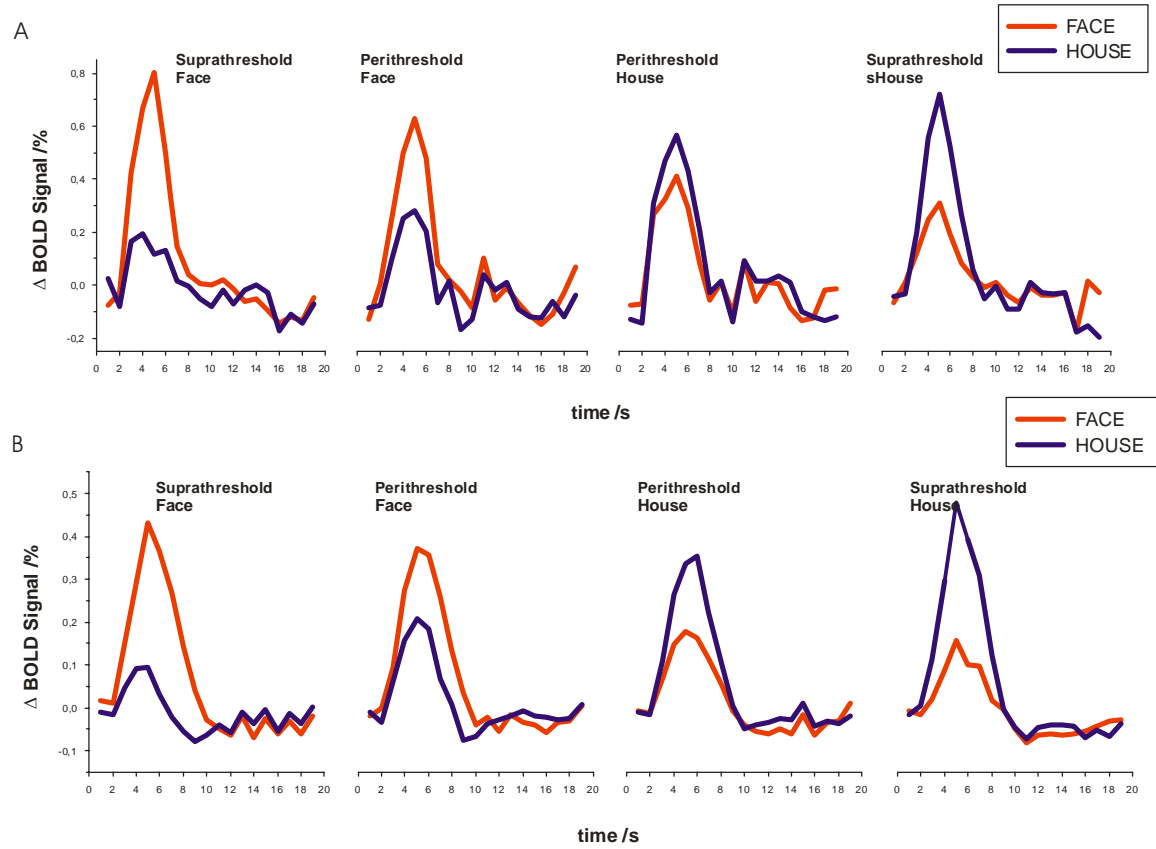


Figure S1. Time courses of BOLD responses to the four conditions in maximally face-responsive and house-responsive regions, respectively. A) Time course data from a representative subject. **B)** Group average (n=12).

Figure S2

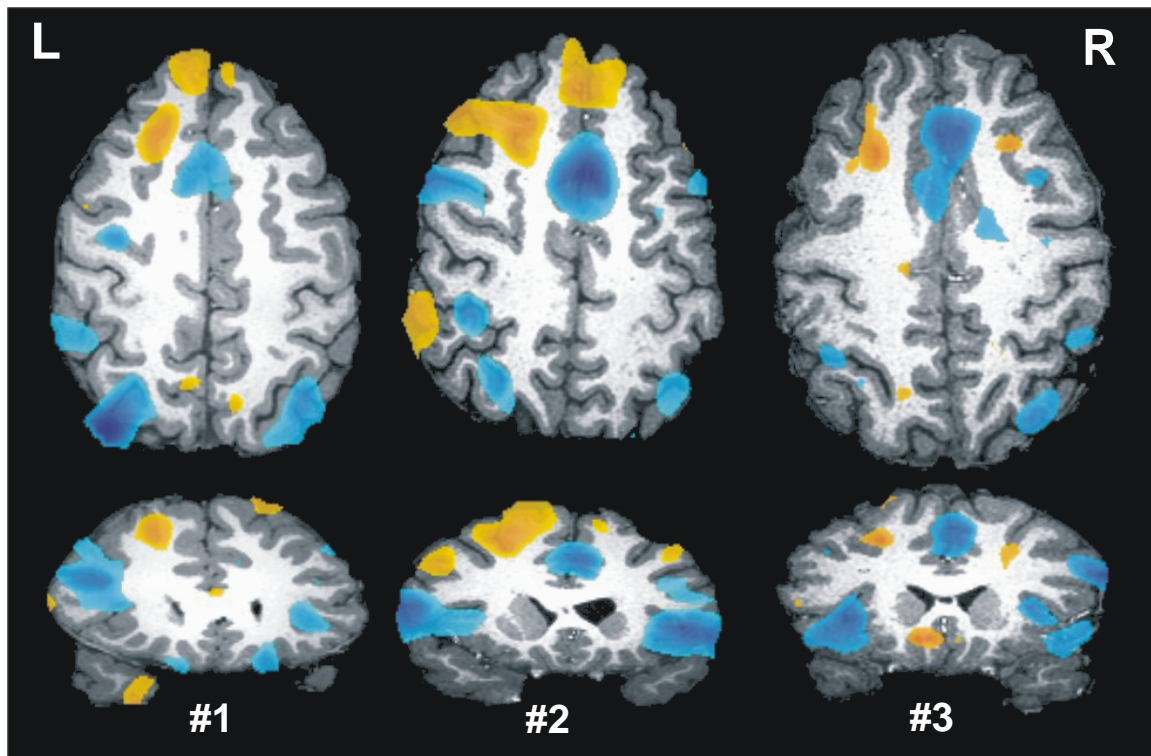


Figure S2. Statistical maps showing main effect of task difficulty in 3 individual subjects. Colour scale and slice positions shown here are the same as in Figure 3 of main article (orange: easier [low noise proportion] > harder ([high noise proportion]); blue: harder > easier). Top row: axial slices, bottom row: coronal slices, anatomical reference should be taken from Figure 3 .

Figure S3

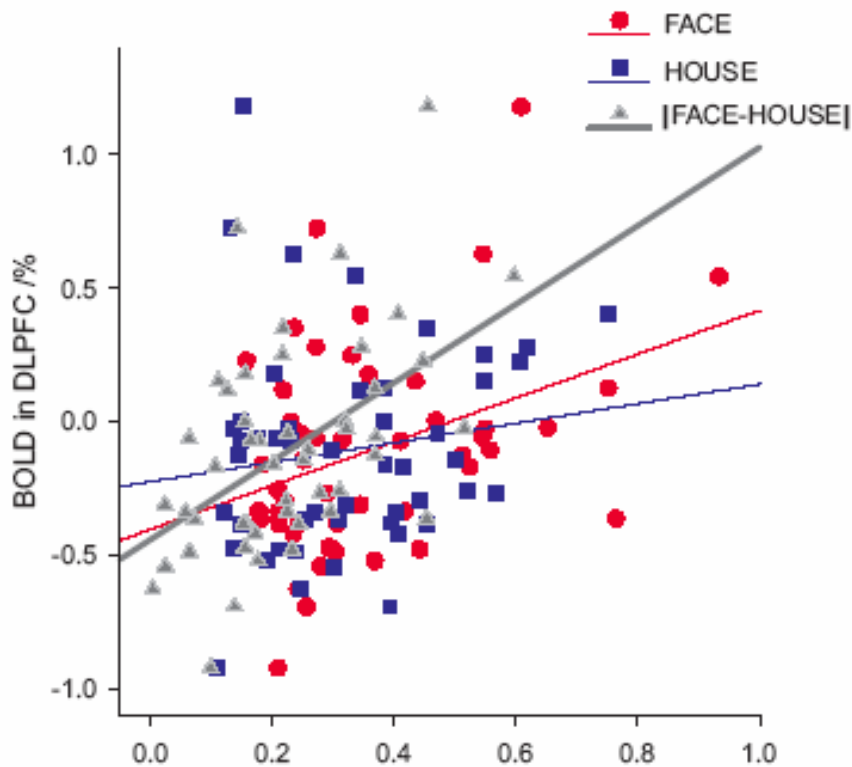


Figure S3. Correlation between changes in BOLD activity in DLPFC with changes in activity in face- and house-responsive regions (FACE, HOUSE) as well as the difference signal |FACE – HOUSE|. Points represent BOLD change for each condition (suprathreshold face, perithreshold face, perithreshold house, suprathreshold house) and subject. Correlation with BOLD activity in DLPFC: |FACE-HOUSE| $r = 0.507$ ($p < 0.0001$), FACE $r = 0.366$ ($p = 0.011$), HOUSE $r = 0.146$ ($p = 0.322$). Partial correlation between |FACE-HOUSE| and DLPFC controlling for FACE and HOUSE remained significant ($r = 0.301$, $p = 0.038$). These results indicate that the correlation between changes in activity in DLPFC with the difference signal is better than with the activity from either the face-responsive or house-responsive regions alone (see Supplemental Methods & Data for a detailed description of control analyses).