

Figure S1 Raw ERBP response

Narrow band ERBPs of the representative contact (same as in Fig 2) in the right lateral fusiform gyrus responding to face stimuli are plotted in A) decimal scale, B) logarithmic scale, C) dB scale (normalized with respect to power during baseline epoch). The narrow band ERBPs were obtained by spectral analysis with Morlet wavelet of center frequency from 4Hz to 147 Hz with $2^{1/5}$ step, and f/σ of 7 (for center frequency of 4, 8, 16, 32, 64 and 128 Hz, respective ofs are 0.6, 1.1, 2.3, 4.6, 9.1 and 18.3 Hz, and ots

are 279, 139, 69.6, 34.8, 17.4 and 8.7 ms). Color coding of each narrow band is indicated in the left lower inset. D) wide band ERBPs are plotted using a dB scale. Wide band ERBP are obtained by averaging the normalized narrow band ERBPs with center frequency between 4 and 7, 8 and 14, 16 and 28, 32 and 56, and 64 and 147. The figures illustrate 1) brief wide-band increase of power after the onset of static face, 2) power in high gamma band ranges sustained longer after onset of both static and dynamic stimuli, 3) power in lower frequency bands roughly below the alpha range decreased prominently after the onset of dynamic stimuli, but was less obvious after the onset of static stimuli, 4) the higher the frequency, the better the time resolution with this method of time-frequency analysis.

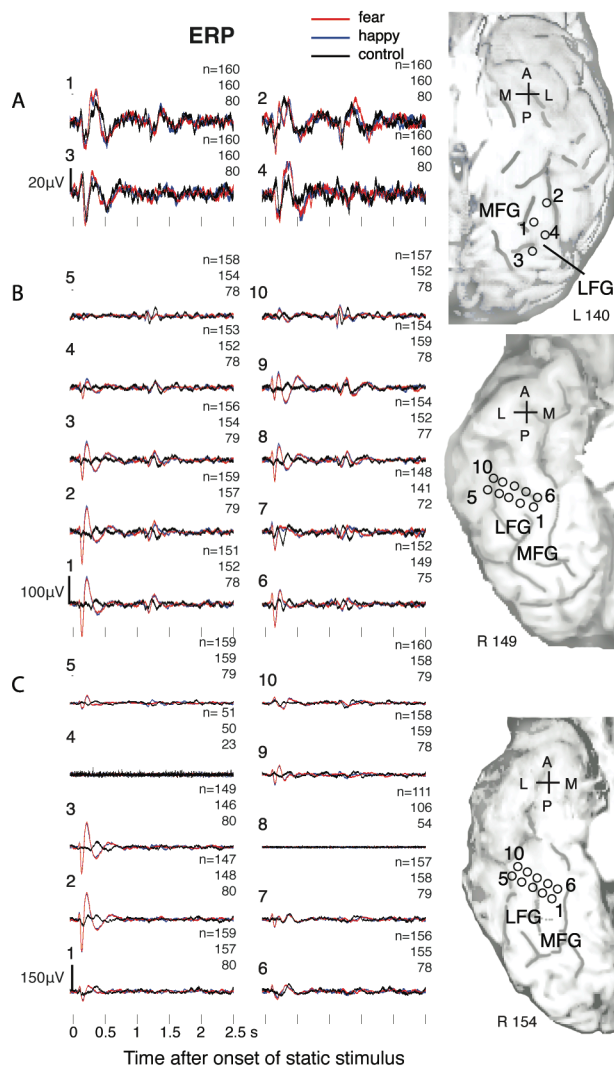


Figure S2

ERP responses to both static and dynamic stimuli recorded from the same subjects and contacts corresponding to Fig. 3. ERPs were recorded on the left ventral cortex (A) and the right ventral cortex (B and C). 0 and 1 s in x-axis indicate onset of static stimuli and onset of dynamic stimuli, respectively. Red, blue and black ERP plots represent responses to morph-to-fear, morph-to-happy and non-face control respectively. Thickness of lines represents one sem above and below the mean. A: anterior, P:

posterior, L: lateral, M: medial, LFG: lateral fusiform gyrus, MFG: medial fusiform gyrus.

Numbers shown in upper right insets of each panel indicate, from top to bottom, numbers of trials for morph-to-fear, morph-to-happy, and non-face control trials.

Numbers in upper left inset of each panel indicate the contact number from which the recording was made (cf. to anatomical brain images).

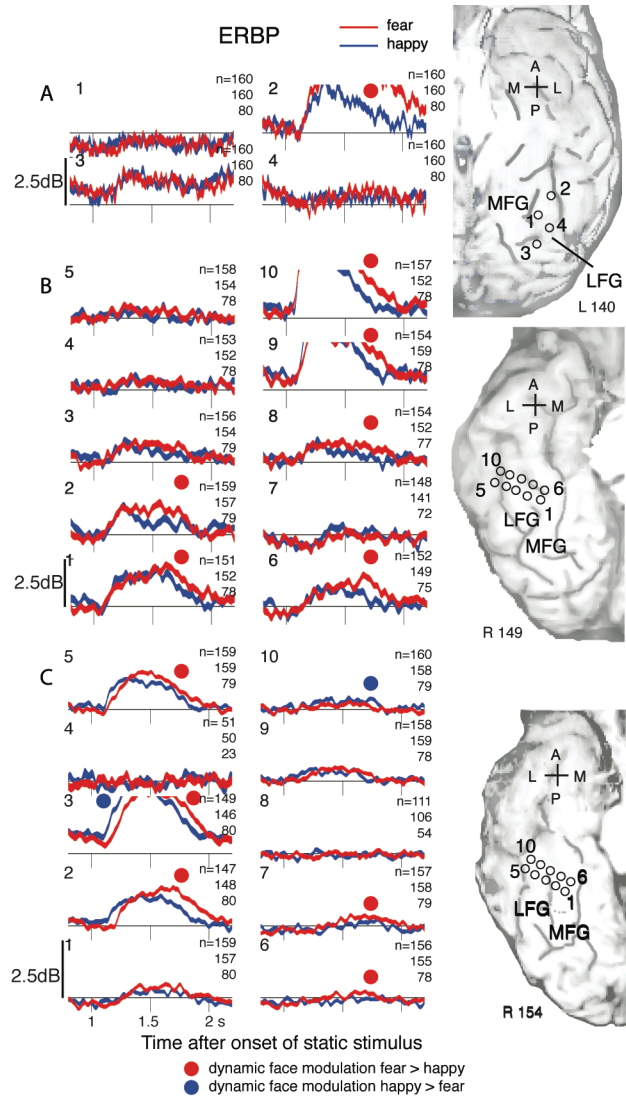


Figure S3

ERBP responses to dynamic face stimuli recorded from same subjects and contacts corresponding to Fig. 3, with larger y axis magnification. ERBPs were recorded on the left ventral cortex (A) and the right ventral cortex (B and C). 1 s on the x-axis indicates the onset of the dynamic epoch. Red and blue ERBP plots represent responses to morph-to-fear and morph-to-happy respectively. Thickness of lines represents one sem above and below the mean. Red dots indicate epochs in which ERBPs elicited by

fearful dynamic faces was larger than that by happy dynamic faces, and blue dots indicate the epoch in which ERBPs elicited by happy dynamic were larger than those elicited by fearful dynamic faces. A: anterior, P: posterior, L: lateral, M: medial, LFG: lateral fusiform gyrus, MFG: medial fusiform gyrus. Numbers shown in upper right insets of each panel indicate, from top to bottom, numbers of trials for morph-to-fear, morph-to-happy, and non-face control trials. Numbers in upper left inset of each panel indicate the contact number from which the recording was made (cf. to anatomical brain images).

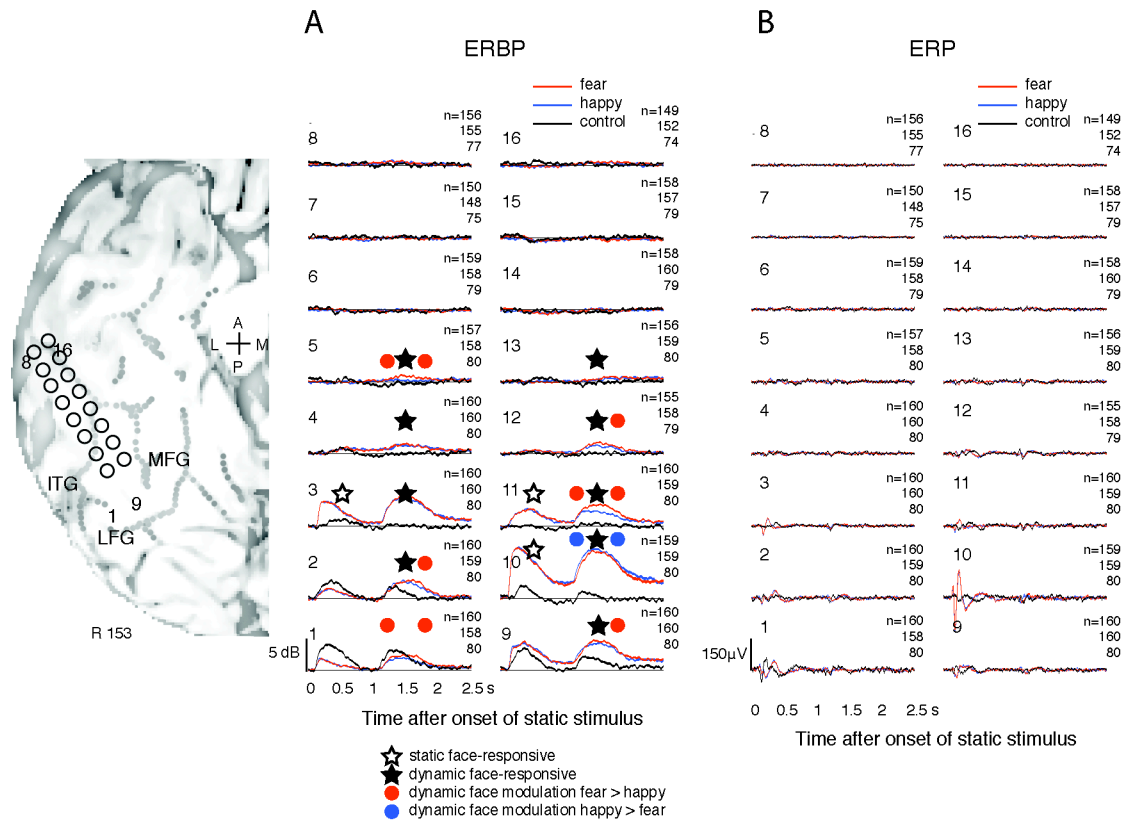


Figure S4.

ERBP (A) and ERP (B) to both static and dynamic face stimuli. They were recorded on the right ventral temporal cortex shown on the MRI surface rendering. 0 and 1 s in x-axis indicate onset of static stimuli and onset of motion stimuli, respectively. Red, blue and black plots represent responses to morph-to-fear, morph-to-happy and non-face control, respectively. Thickness of lines represents one sem above and below the mean. White and black stars indicate face-selective ERBPs elicited by static faces and dynamic faces, respectively. Red dots indicate epochs in which ERBPs elicited by fearful dynamic faces were larger than those elicited by happy dynamic faces, and blue dots indicate the converse selectivity. A: anterior, P: posterior, L: lateral, M: medial, LFG: lateral fusiform gyrus, MFG: medial fusiform gyrus. Numbers shown in upper right

insets of each panel indicate, from top to bottom, numbers of trials for morph-to-fear, morph-to-happy, and non-face control trials. Numbers in upper left inset of each panel indicate the contact number from which the recording was made (cf. to anatomical brain images).

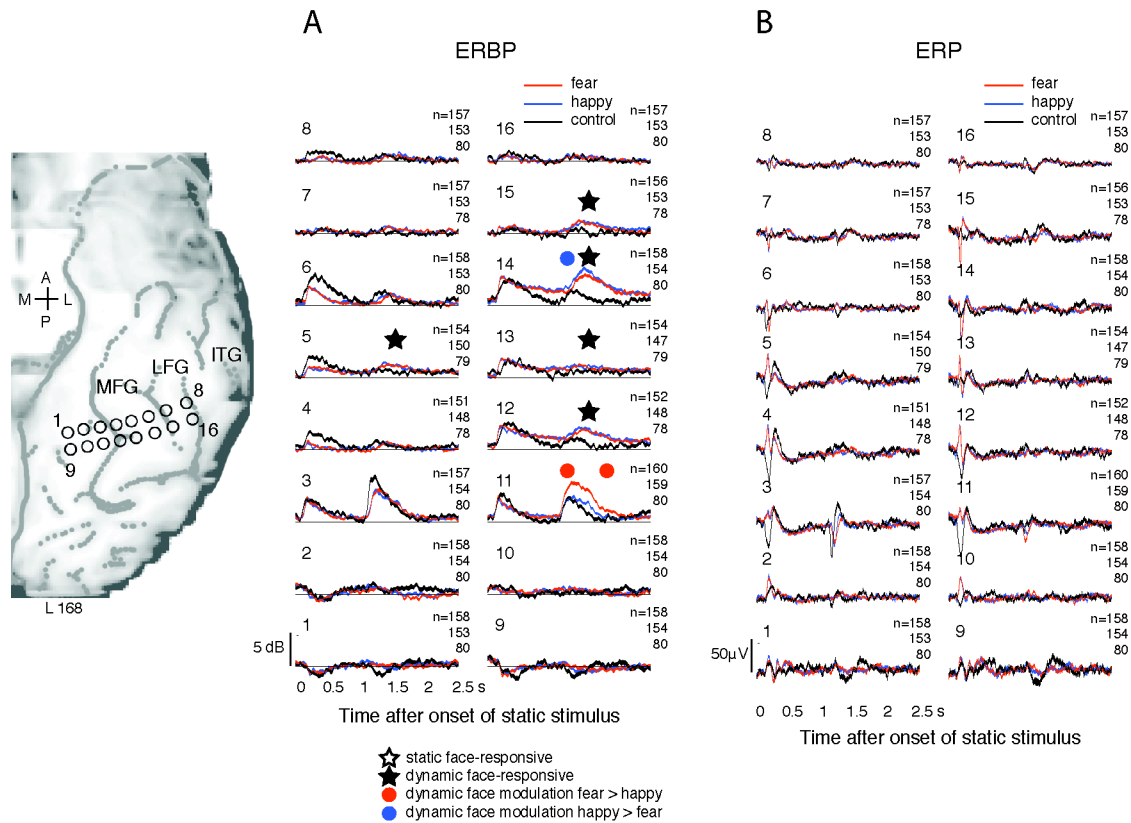


Figure S5

ERBP (A) and ERP (B) to both static and dynamic face stimuli. They were recorded on the left ventral temporal cortex shown on the MRI surface rendering. 0 and 1 s on the x-axis indicate onset of static and dynamic epochs, respectively. Red, blue and black plots represent responses to morph-to-fear, morph-to-happy and non-face control, respectively. Thickness of lines represents one sem above and below the mean. White and black stars indicate face-selective ERBPs elicited by static faces and dynamic faces, respectively. Red dots indicate epochs in which ERBPs elicited by fearful dynamic faces were larger than those elicited by happy dynamic faces, and blue dots indicate the converse selectivity. A: anterior, P: posterior, L: lateral, M: medial,

LFG: lateral fusiform gyrus, MFG: medial fusiform gyrus. Numbers shown in upper right insets of each panel indicate, from top to bottom, numbers of trials for morph-to-fear, morph-to-happy, and non-face control trials. Numbers in upper left inset of each panel indicate the contact number from which the recording was made (cf. to anatomical brain images).