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Neural mechanisms of perceptual grouping in human visual cortex

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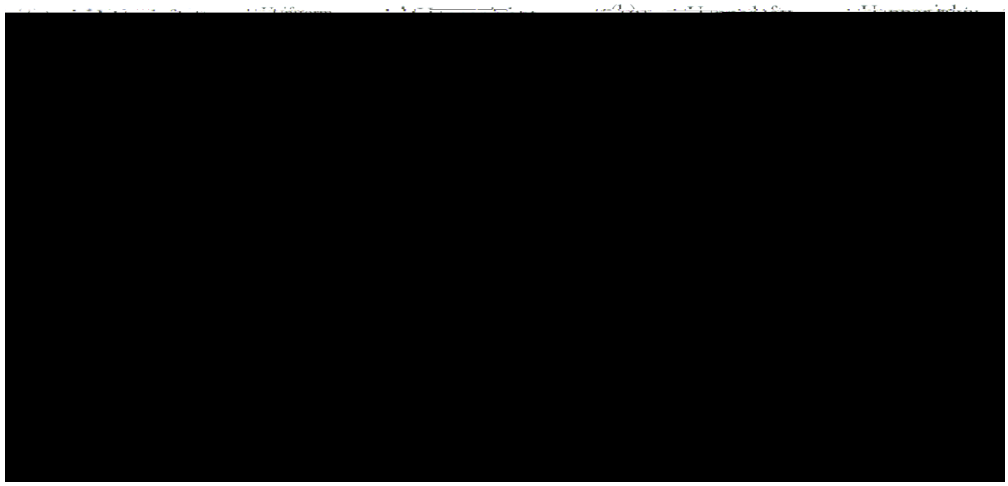
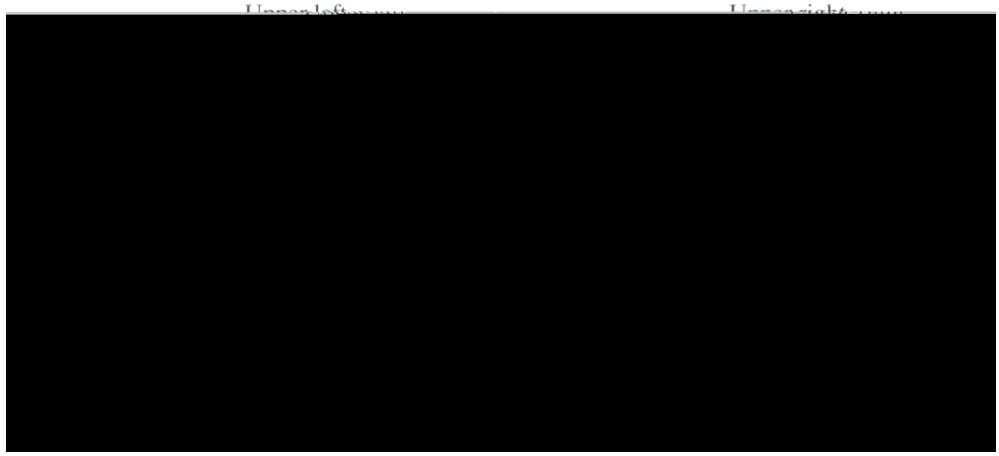
Fig. 2. (a) Grand average ERPs





main effect of Grouping at parieto-occipital electrodes between 60 and 80 ms for the proximity-grouping condition ($F(1,15) = 5.59$, $P < 0.03$). The negative C1 was of smaller amplitude (less negative) to proximity-grouping than uniform stimuli in the upper visual field whereas the positive C1 was of larger amplitude (more positive) to

above hypothesis. However, the ecological significance of our results is still unclear.

Unlike the C1 component, the P1 with maximum amplitudes over lateral occipital areas was not influenced by grouping of local elements, nor was the following N1 component. Thus the C1 effect reflects grouping operation that is specific to the visual cortex close to the calcarine fissure. The lateral extrastriate cortex, where the P1 is generated[9,10], may not play an important role in the process of perceptual grouping.

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