Object selectivity of local field potentials and spikes in the macaque inferior temporal cortex.

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This paper confirms a systematic mapping of sensitivity to different visual objects in the inferotemporal cortex, in the primate 'ventral stream', using an electrophysiological measurement of local field potentials (LFPs).

A mapping of visual object sensitivity has been reported in previous single unit and fMRI studies; this LFP result links the neural mechanisms underlying both those previous techniques, and confirms the robust nature of this organization. Clinical damage to this region of the brain can produce object-selective agnosias, such as 'prosopagnosia' (a deficit in recognizing faces).

Such clinical results strongly suggest the presence of an object-selective map, but the details of this 'object alphabet' are not yet known.

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