Evidence for participation by object-selective visual cortex in scene category judgments

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Supplementary Figure 1. Kitchens and bathrooms are distinguishable on the basis of spatial properties. A) Histograms of crowd-sourced ratings of the spaciousness of 500 exemplars each of bathrooms (gray) and kitchens (black), showing that bathrooms are typically smaller rooms than kitchens. Paid raters (n=65) recruited through Amazon Mechanical Turk viewed images of real-world kitchens and bathrooms collected for the internet. Using a drag-and-drop graphical interface, each rater was asked to arrange 100 randomly drawn images (50 from each category) along a horizontal scale in the order of the perceived “spaciousness” of the room each depicted. Final positions of images along the rating scale were z-scored with each participant being combined into the histograms shown here. The means of these distributions are significantly different (t-test, p< 0.001). Dashed curves are normal distributions fit to the same data. B) Average proportion of kitchen judgments as a function of the floor area of ambiguous scenes viewed during the screening phase, among participants in the present fMRI study. Scenes used in fMRI scans were drawn from the same range of floor areas. Participants were selected on the basis of demonstrating a positive relationship between floor area and proportion of kitchen judgments, making the positive slope here expected and trivial. We include these data to show that the pool of room sizes was capable of producing a large difference in category judgments over its size. Dashed red lines denote 95% bootstrapped confidence interval.