

## Supplementary Material: Measuring and increasing the capacity of Natural HOG Statistics

More results for top retrievals using different models are shown in Fig. 1. Overall, retrievals by Multiscale-WHO and Kernelized-WHO tend to look more visually coherent with the query than ones by WHO.

Precision-recall curves for Multiscale-WHO and Kernelized-WHO on all 20 PASCAL categories are shown in Fig. 2.

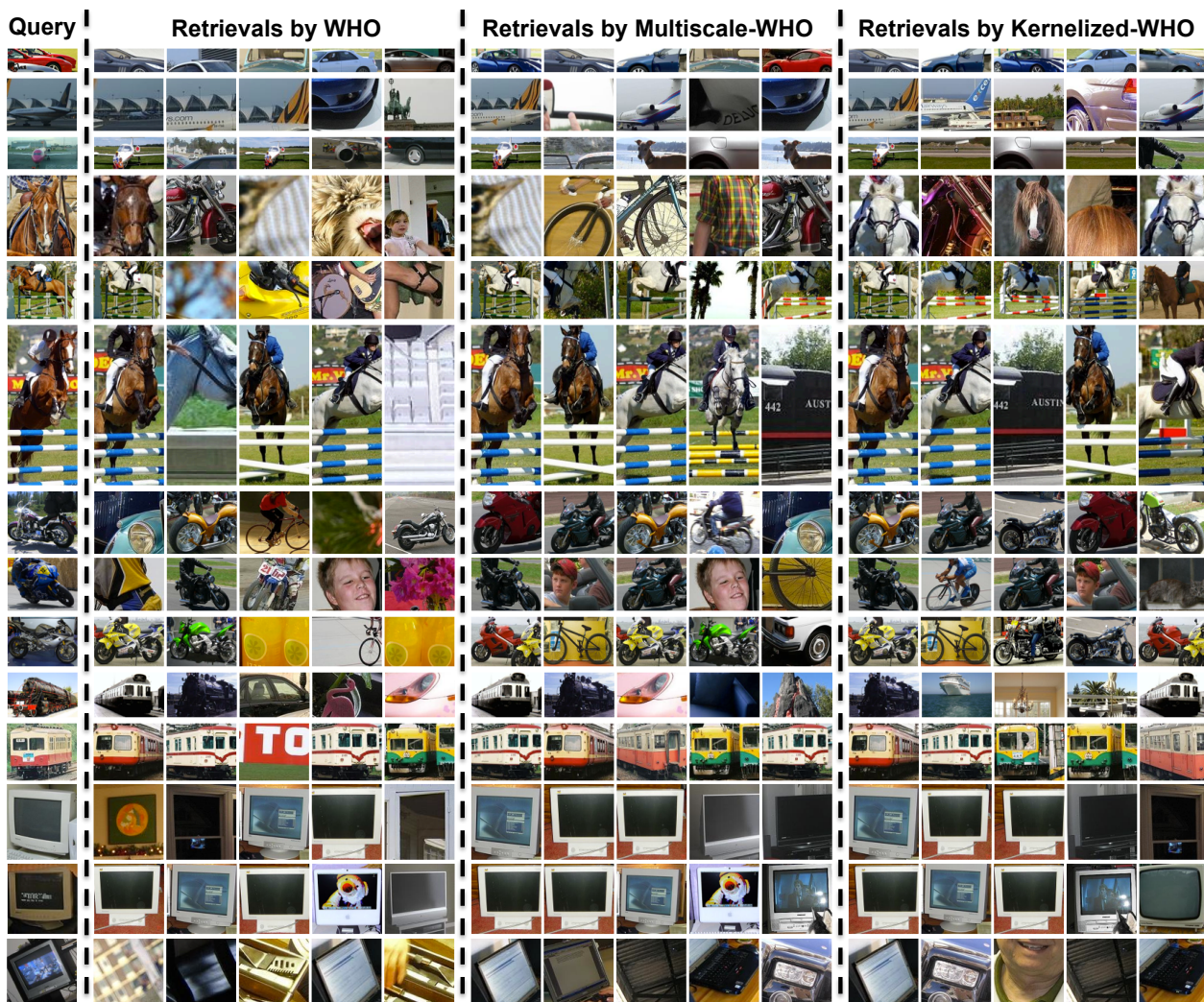


Figure 1. Top retrievals by different models for a variety of query exemplars.

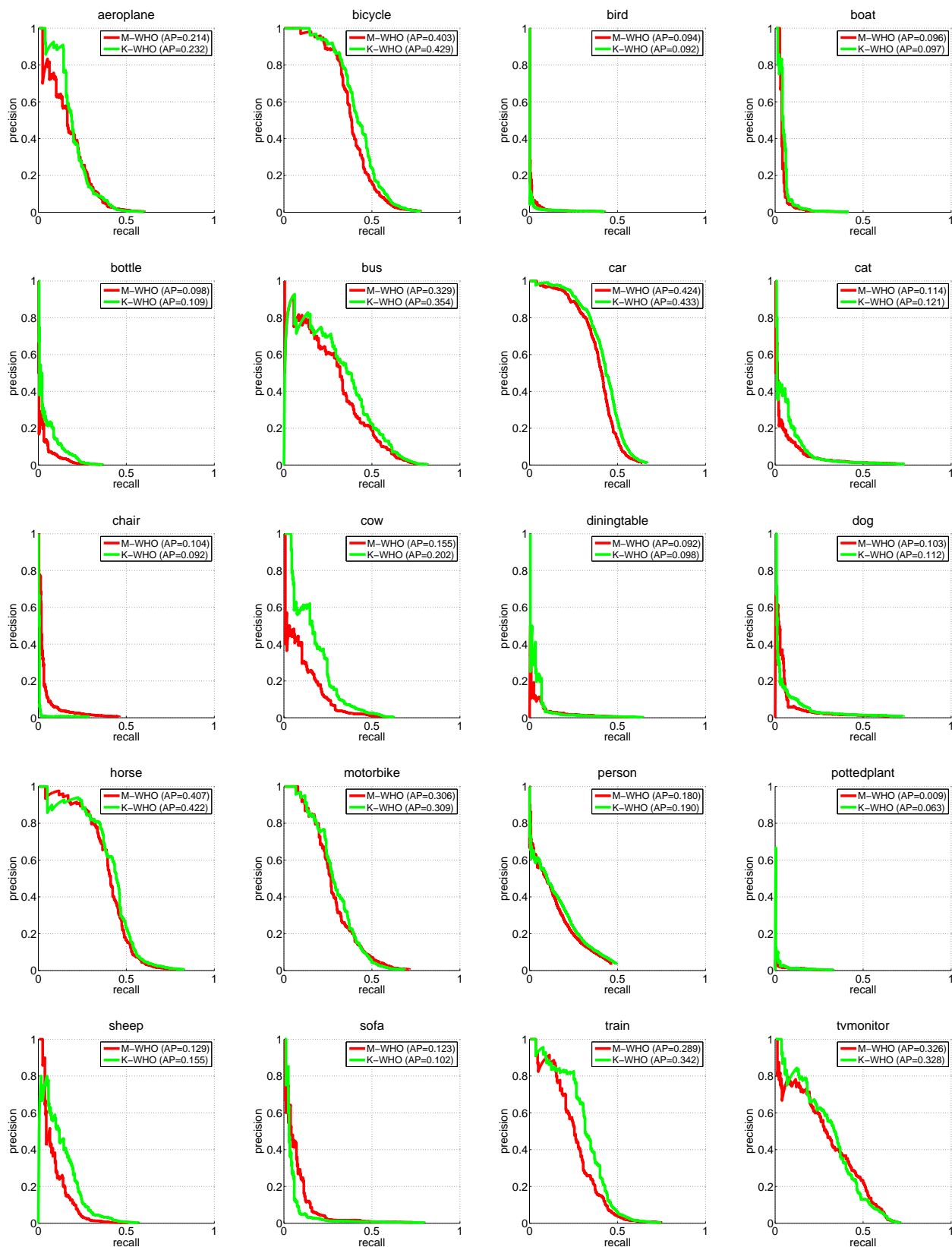


Figure 2. Precision-recall curves for Multiscale-WHO and Kernelized-WHO on all 20 PASCAL categories.