Gradient-Induced Co-Saliency Detection

Supplemental File

1 More About Our *CoCA* Dataset

In the main paper, we demonstrate the main advantage of *CoCA*; that is, except for the co-salient object(s), each image contains at least one extraneous salient object, which enables the dataset to better evaluate the models' ability of discovering co-salient object(s) among multiple foregrounds. Due to the space limitation of the main paper, the more advantages of our proposed *CoCA* are shown in this section.

High-quality labeling. As shown in Fig. 1, our *CoCA* provides precise labeling. The detailed structure inside the object is accurately labeled, and the occlusion parts are carefully removed. High-quality annotations make the evaluation results of the dataset more credible.

Label diversity. The *CoCA* dataset provides four levels of annotations, including class level, bounding box level, object level, and instance level. In Fig. 2 and 3, we show some of the annotations of *CoCA*. Rich annotations expand the application scenarios of *CoCA*. The class-level annotations can serve the image-set classification task [3,5]. The bounding-box-level annotations can serve the co-localization task [2,6]. The object-level annotations can serve co-saliency detection and few-shot object segmentation [7,8]. The instance-level can be used for instance co-segmentation [5] and few-shot instance segmentation [1,4].

Fig. 1. High-quality labels of *CoCA*.

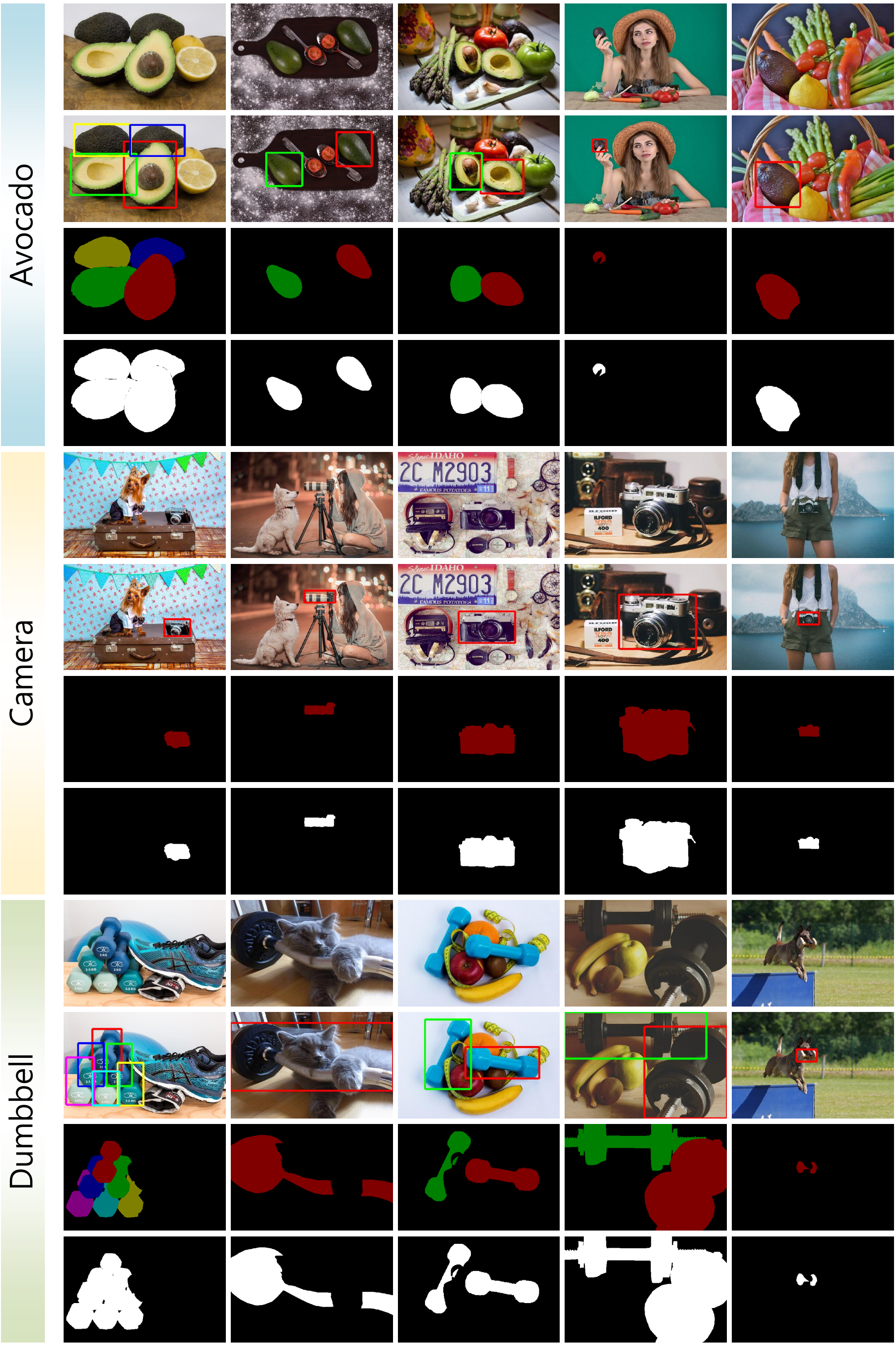

Fig. 2. Multi-level annotations of *CoCA*. It includes class level, bounding box level, object level, and instance level. (1/2)

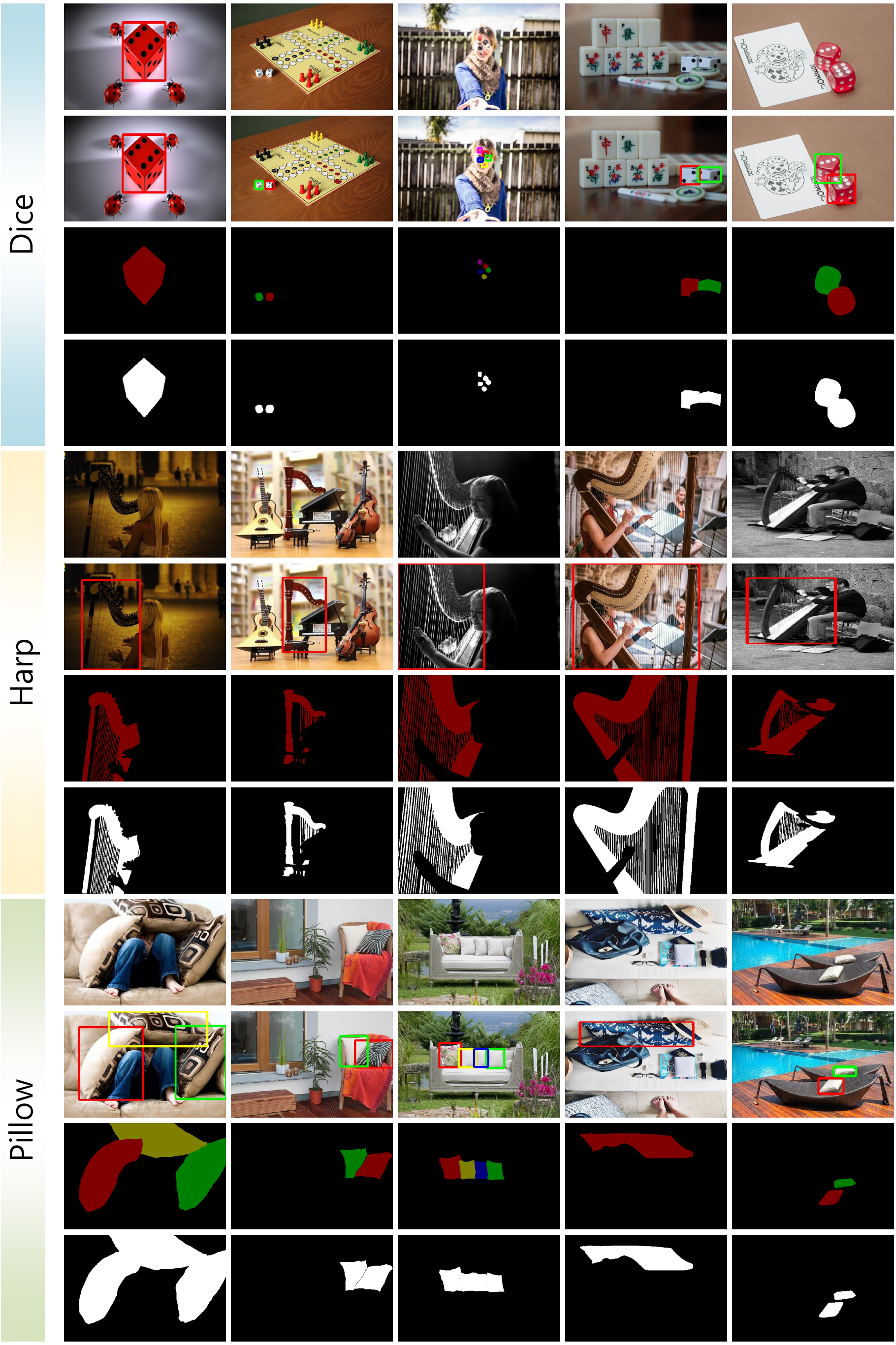

Fig. 3. Multi-level annotations of *CoCA*. It includes class level, bounding box level, object level, and instance level. (2/2)

References

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