

Fig1. Pairwise cosine similarities of positive/negative samples in COCO with different values of hyperparameter \$C\$. (Response to Review 29Mf, Item 7.)

Joint Cluster 1 (mismatched image and text)



- 01. There is a phone on top of a
- calculator
 02. A infant holding a baby
 toothbrush in his hand looking at
- it.
 03. A little boy is playing with a suitcase.
 04. A young boy reaching up to grab a red apple.

Joint Cluster 3 (text only, missing image)

- 01. A herd of sheep grazing on a lush green field.
- 02. A dog driving an SUV in an open grass covered field.
- 03. A man that is standing in the grass near animals.
- 04. A cow grazing on the grass on the side of a side walk.
- 05. A lush green forest filled with lots of trees.
- 06. A horse standing in a lush green grass field.
- 07. A mother and it's calf standing in a field.
- 08. a number of horses in a field near a building
- 09. Two horses grazing on grass in the sun

Joint Cluster 2 (image only, missing text)



Joint Cluster 4 (text only, missing image)

- 01. there is a cat that is drinking out of the toilet
- 02. A cat sitting in a bathroom sink under a faucet.
- 03. A small cat sits perched on the back of a toilet.
- 04. A black cat is sitting in a bathroom sink.
- 05. A black cat sits in a bathroom sink.
- 06. a cat that is standing on a toilet and next to a sink
- 07. A calico cat drinking from a sink faucet.
- 08. a cat sitting in a bathtub not looking amused
- 09. An orange and white cat laying on top of a sink.

Fig2. The failure case of Naive Concatenation in joint clustering results on the COCO dataset. (Response to Review M1uF, Item 1.)