

A1. Similarity in processing across levels of visual abstraction in AlexNet. a) Top-1 accuracies across types of depiction for humans, VGG16-IN and AlexNet. In comparison to humans, both AlexNet and VGG-16 IN perform poorly on drawings and sketches while showing decent and comparable performance on photos. b) Representational similarities between types of depiction based on CNN input and activations in AlexNet. Representational similarities between photos and both drawings and sketches first increased in pooling layer 1 and 2 in comparison to the similarity given by the CNN input. After that, for both comparisons the similarities dropped in pooling layer 3 and the fully connected layers. In contrast, the drawing-to-sketch similarities steadily increased across layers.