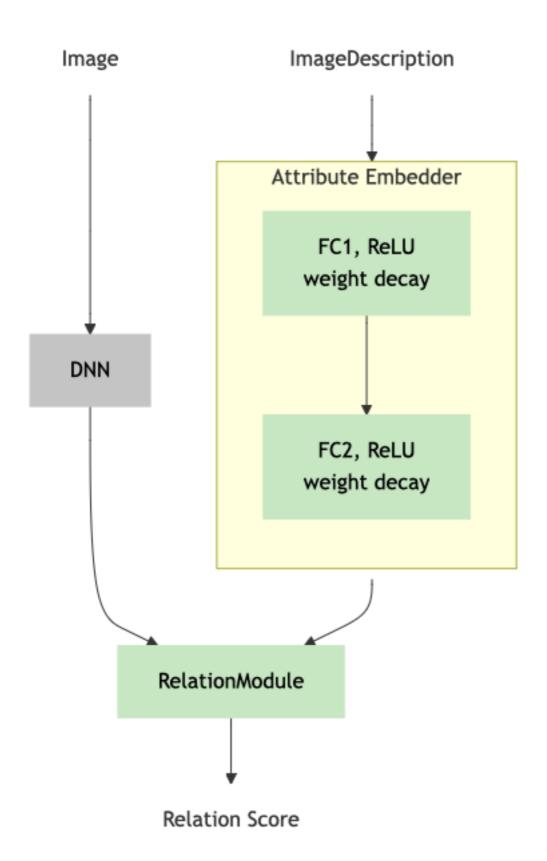
# Zero-Shot Learning (2)



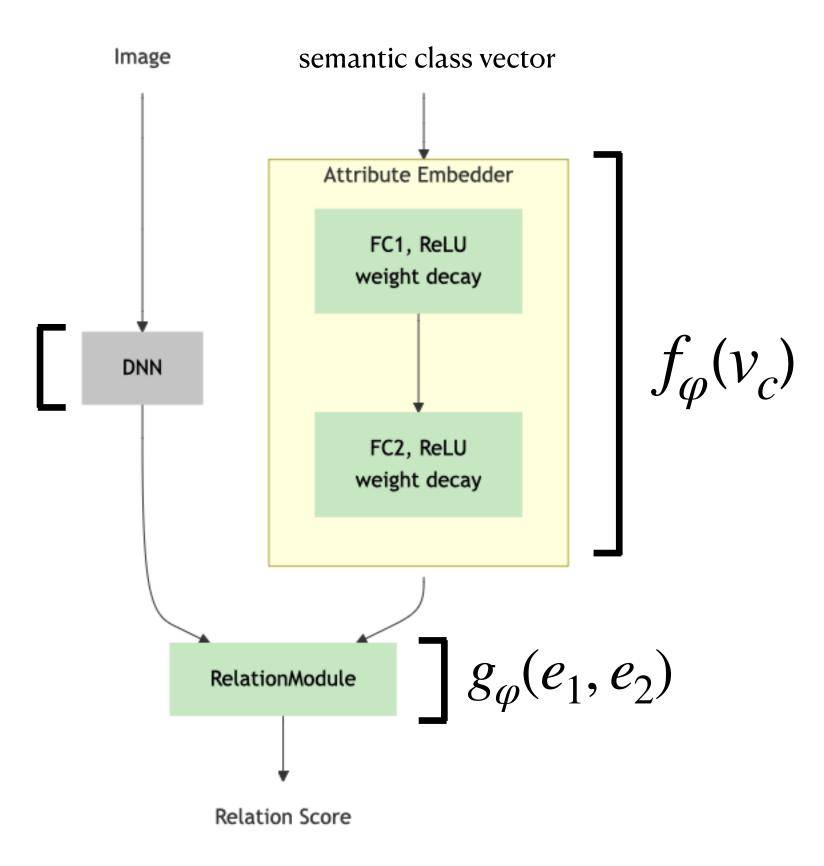
$$\int_{\varphi} f_{\varphi}(v_c)$$

$$g_{\varphi}(e_1, e_2)$$

#### semantic class vector

## Zero-Shot Learning (2)

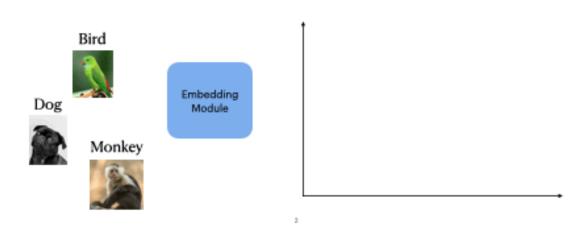
Existing network
(e.g., Inception or
ResNet) pretrained
on ImageNet



## Related Work

### Metric Learning

T. Mensink, J. Verbeek, F. Perronnin, and G. Csurka. Metric learning for large scale image classification: Generalizing to new classes at near-zero cost. In *ECCV*, 2012



### Matching Nets

O. Vinyals, C. Blundell, T. Lillicrap, D. Wierstra, et al. Matching networks for one shot learning. In *NIPS*, 2016.

### Prototypical Nets

J. Snell, K. Swersky, and R. S. Zemel. Prototypical networks for few-shot learning. In NIPS, 2017.