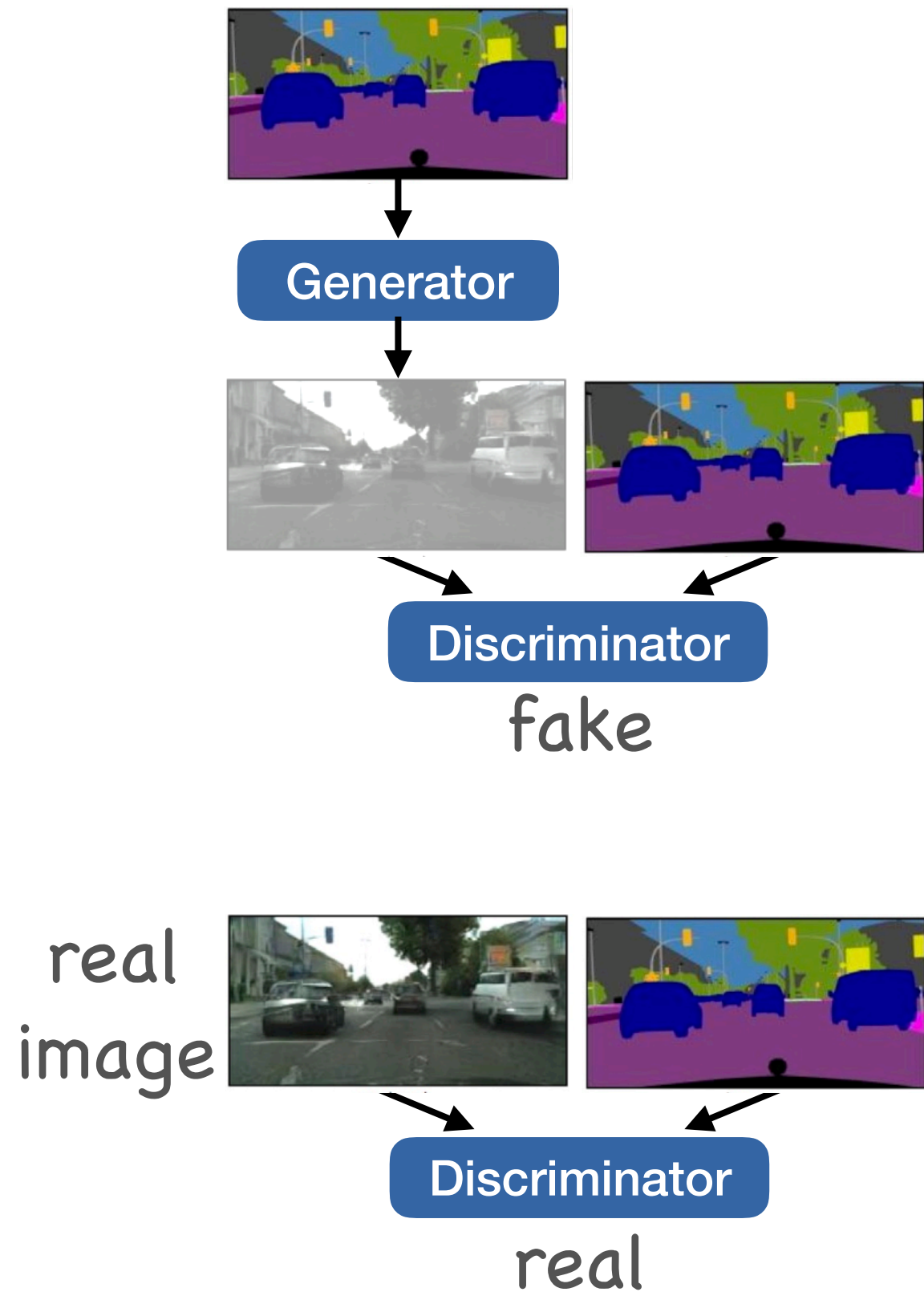


# CycleGAN

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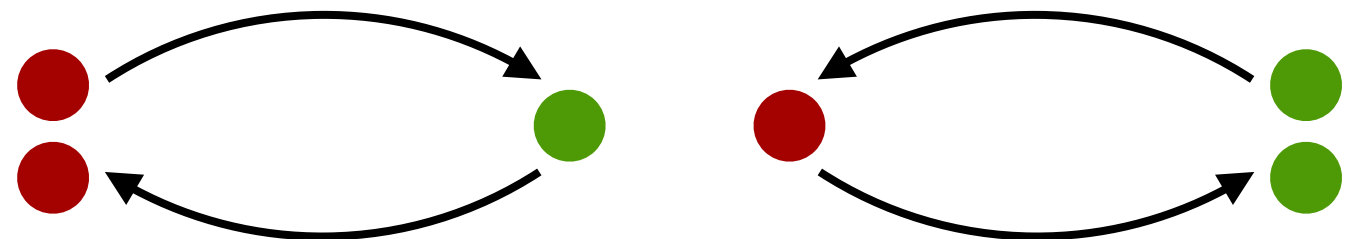
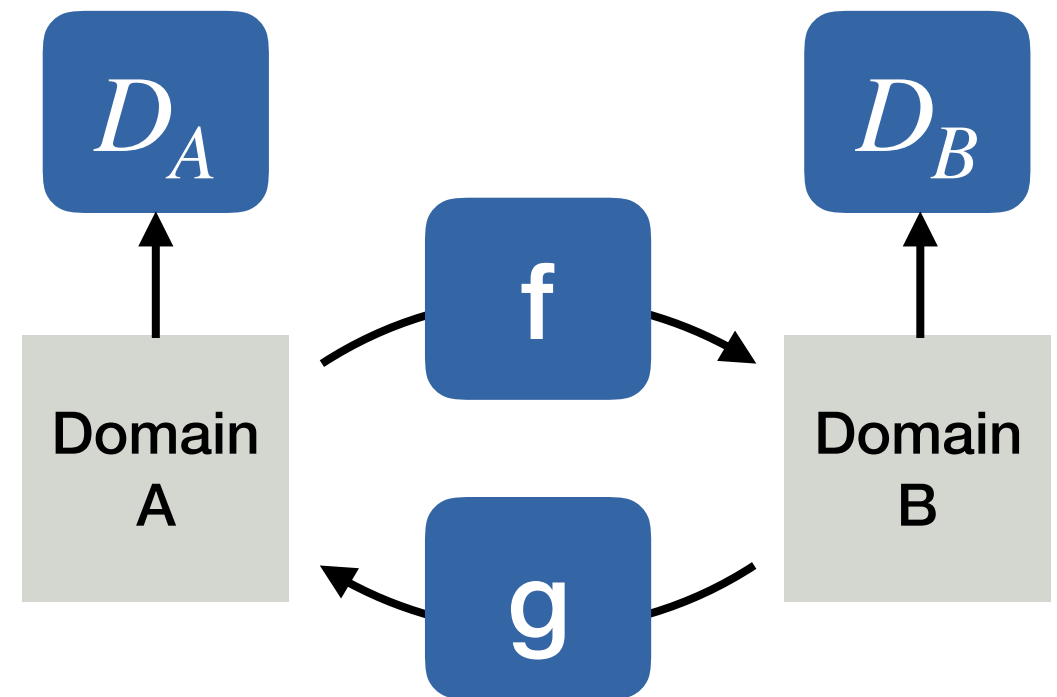
# Pix2Pix

- Translates images from paired input / output data
- How do we do this without pairing?



# CycleGAN

- Train two networks  $f$  and  $g$ 
  - Map between domains
- Loss
  - GAN
  - Reconstruction



# What does CycleGAN do?

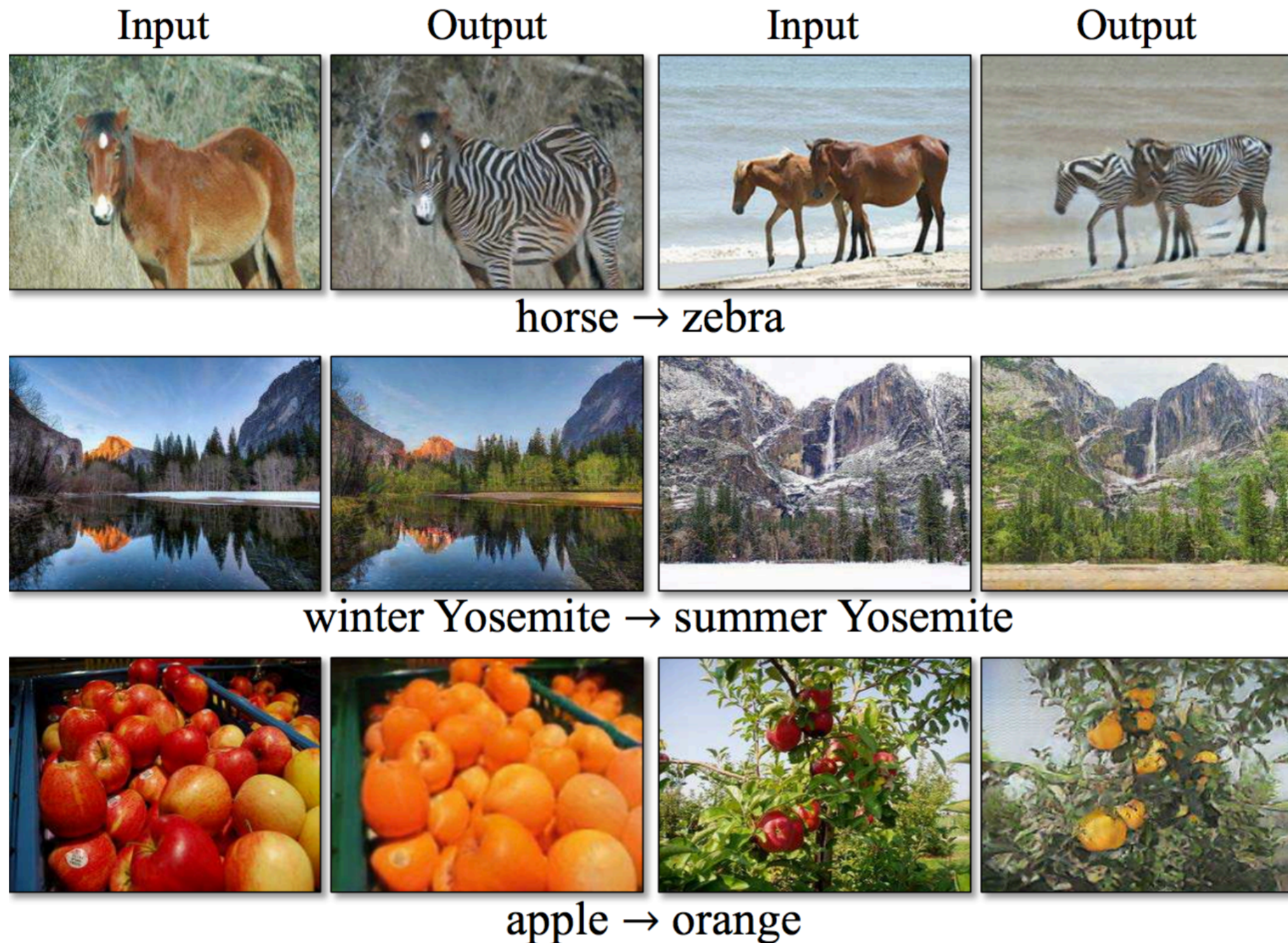


Figure source: Unpaired Image-to-Image Translation using Cycle-Consistent Adversarial Networks, Zhu et al., ICCV 2017



# What does CycleGAN do?

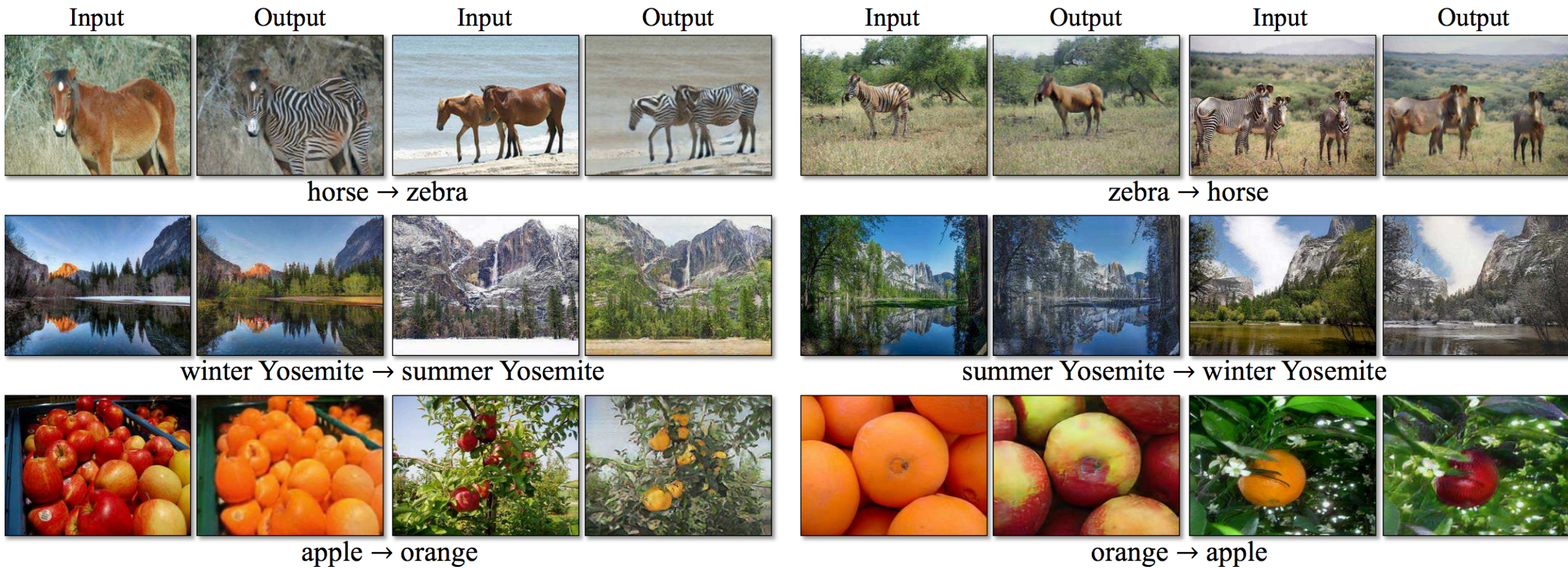


Figure source: Unpaired Image-to-Image Translation using Cycle-Consistent Adversarial Networks, Zhu et al., ICCV 2017

# Why does it work?

- Why learn the right mapping?
- Simplest mapping

