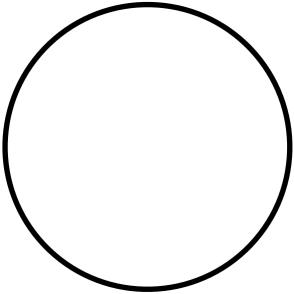
The DatasetGAN [20] paradigm







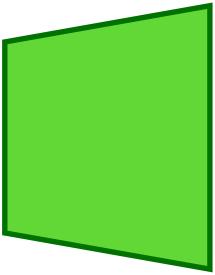


Image Generator







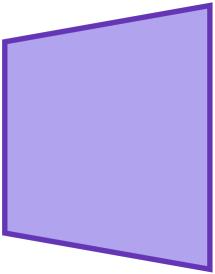




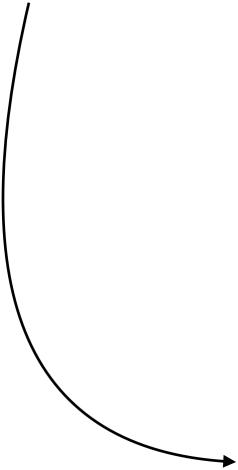
Human annotator







Label Generator











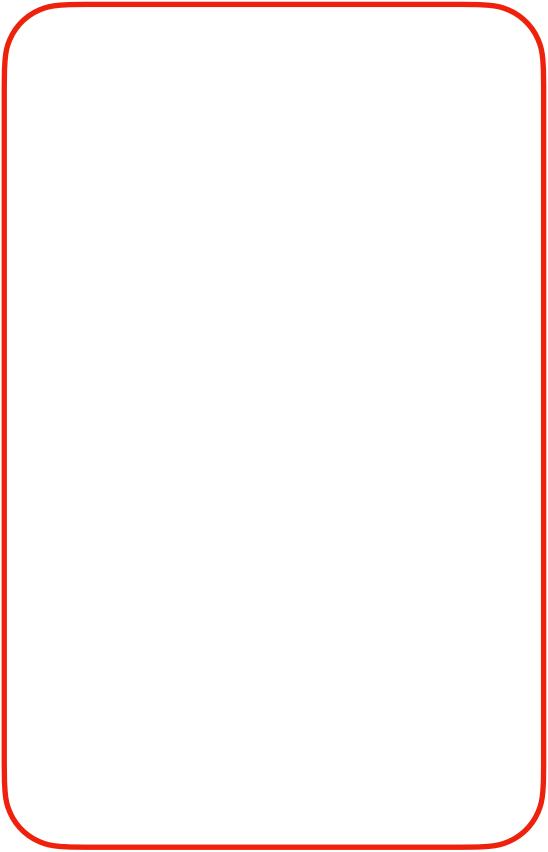
Supervised loss





Annotate small number of GAN generated images, store latent code and label pairs (w,Y)

Train label generator in supervised way with (w, Y) pairs

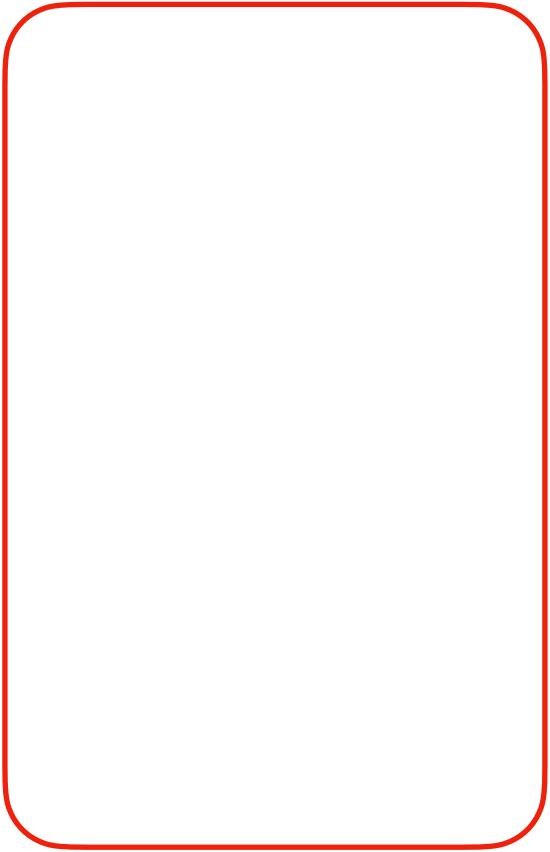


GAN generated images

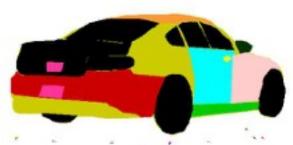
- No manual curation of training data
- Lower quality labels
 [21]

Human annotators

- Type of label synthesized must be human label-able
- Practical costs: money, time, infrastructure)









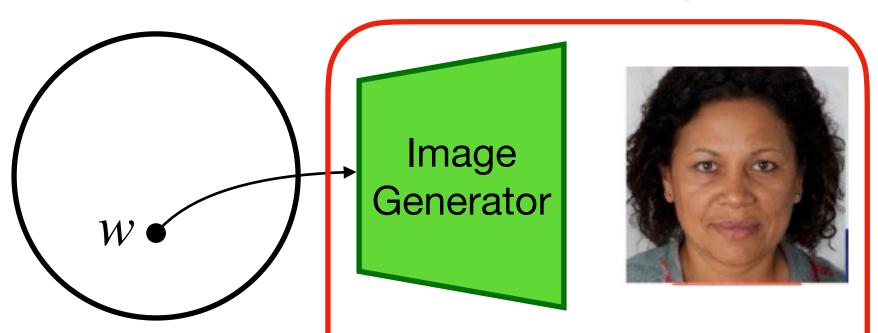


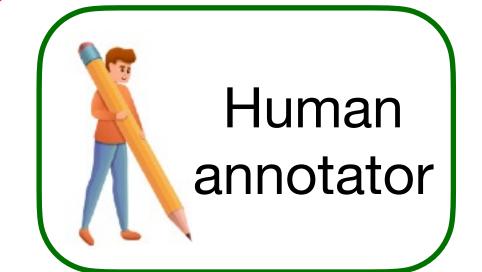
[20] Zhang et al. (2021)

[21] Baranchuk et al. (2022)

The DatasetGAN [20] paradigm

Annotate small number of GAN generated images, store latent code and label pairs (w, Y)







Y





GAN generated images

- No manual curation of training data
- Lower quality labels[21]

Human annotators

- Type of label synthesized must be human label-able
- Practical costs: money, time, infrastructure)







Can we connect existing real images and labels to GAN representations?

