

6/2 進度匯報

應名宥

training result

5000 training data (normal 80000)

1% training step

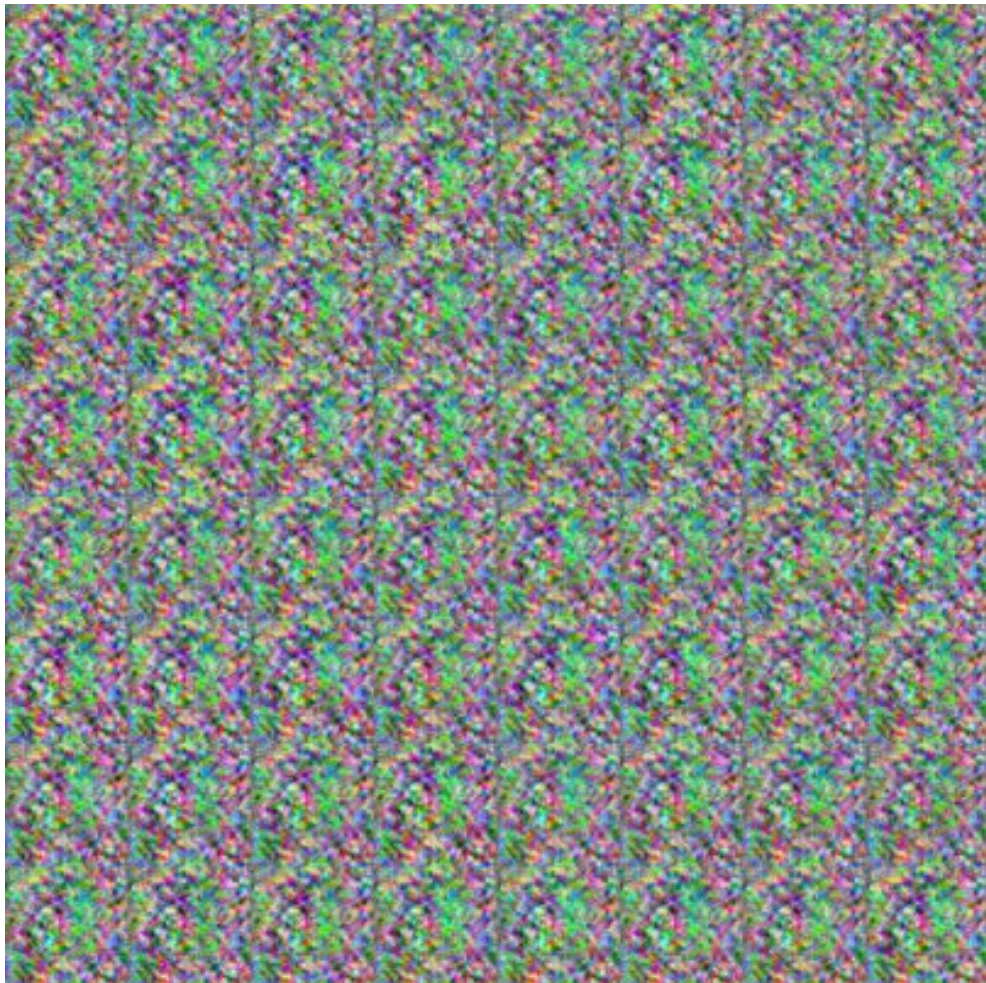
config ADA

修改前



修改前

- 不同的 noise
- 不同的敘述

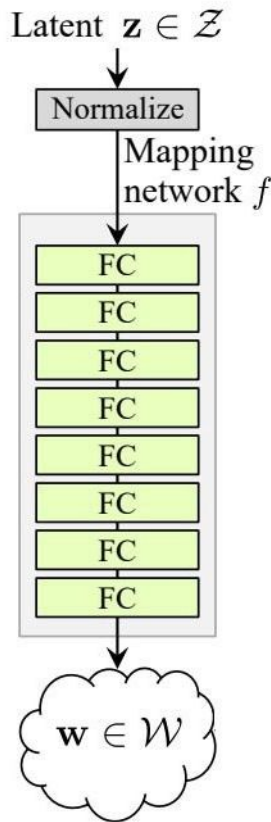


問題

- text feature 造成的影響太小，無法顯著的影響結果
- 經過一定訓練後，連noise都不太能影響結果，模式崩潰
- 限制網路中的神經元個數導致 discriminator 無法指引 generator，generator 也無法有效的修改。
- 使用資料太少，即使做了 ADA 針對小資料集做調整依然不夠。

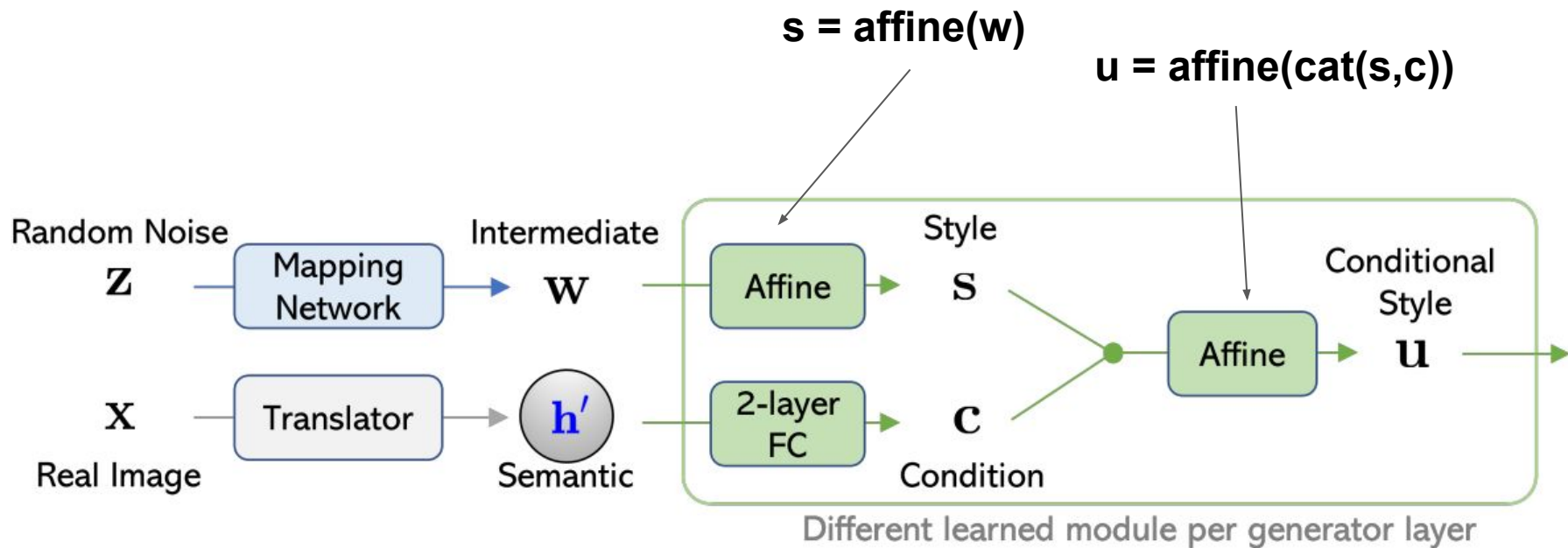
text feature mapping network

the traditional network, **latent vectors directly pass into the block** just after the normalization whereas in the StyleGAN network **latent vectors after normalization pass through the mapping network** (layer of 8 fully connected networks) then the outputs are transformed



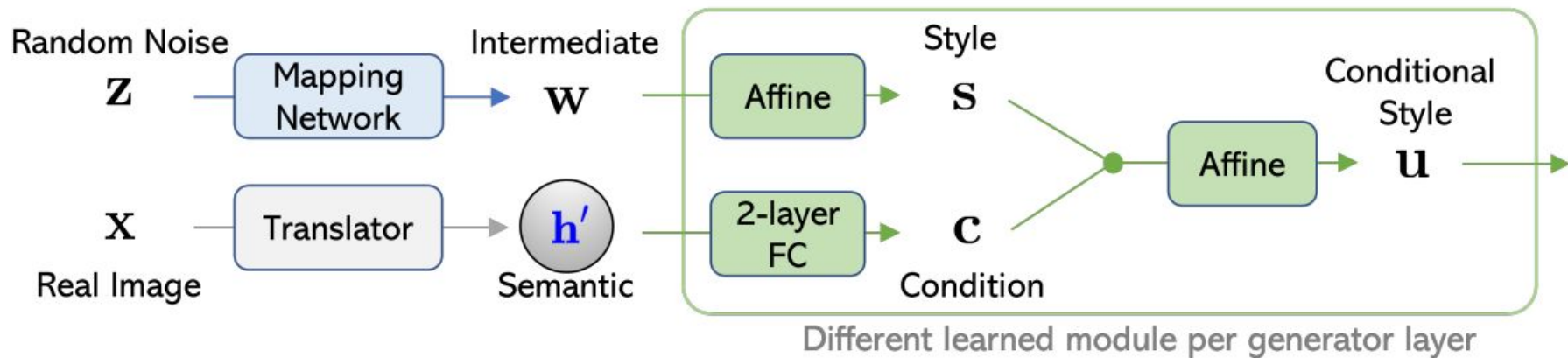
(b) Style-based generator

generator layer

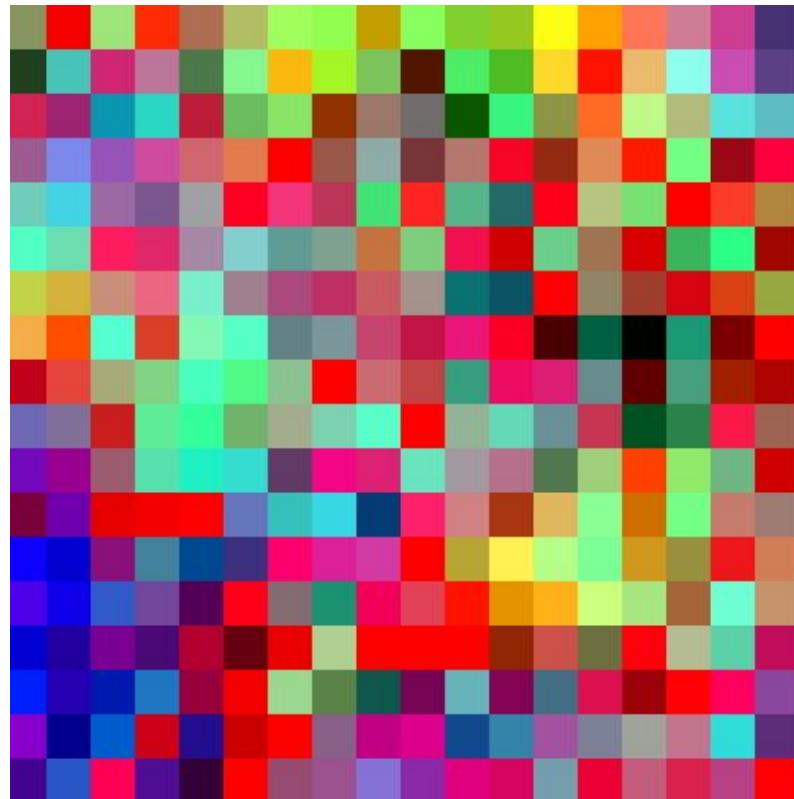
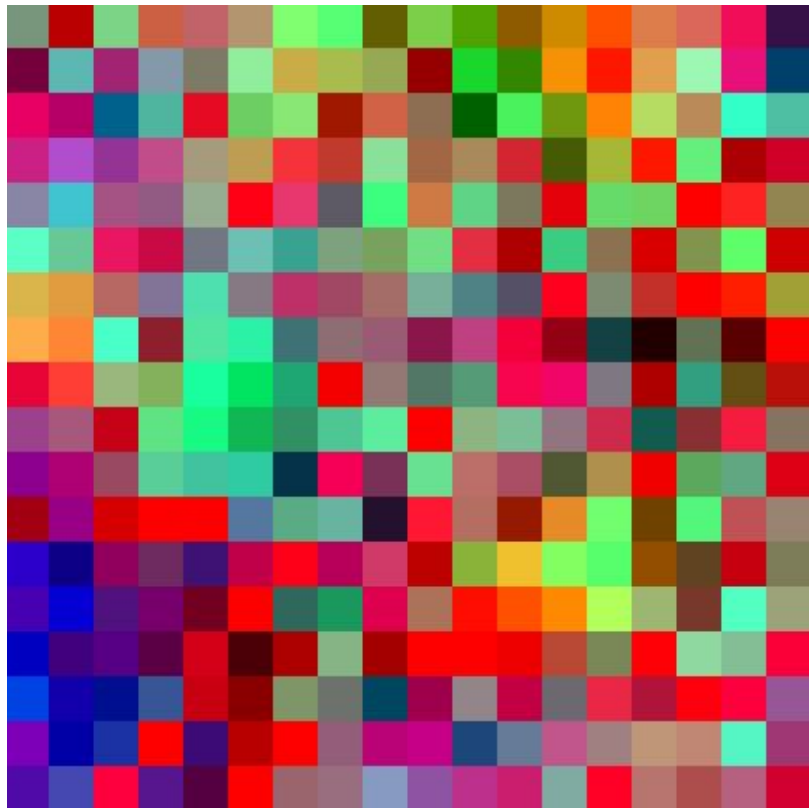


不同的實作

```
fts = self.pre_0(fts)
fts = self.pre_1(fts)
styles = self.affine_0(torch.cat([fts, w], dim=-1))
```

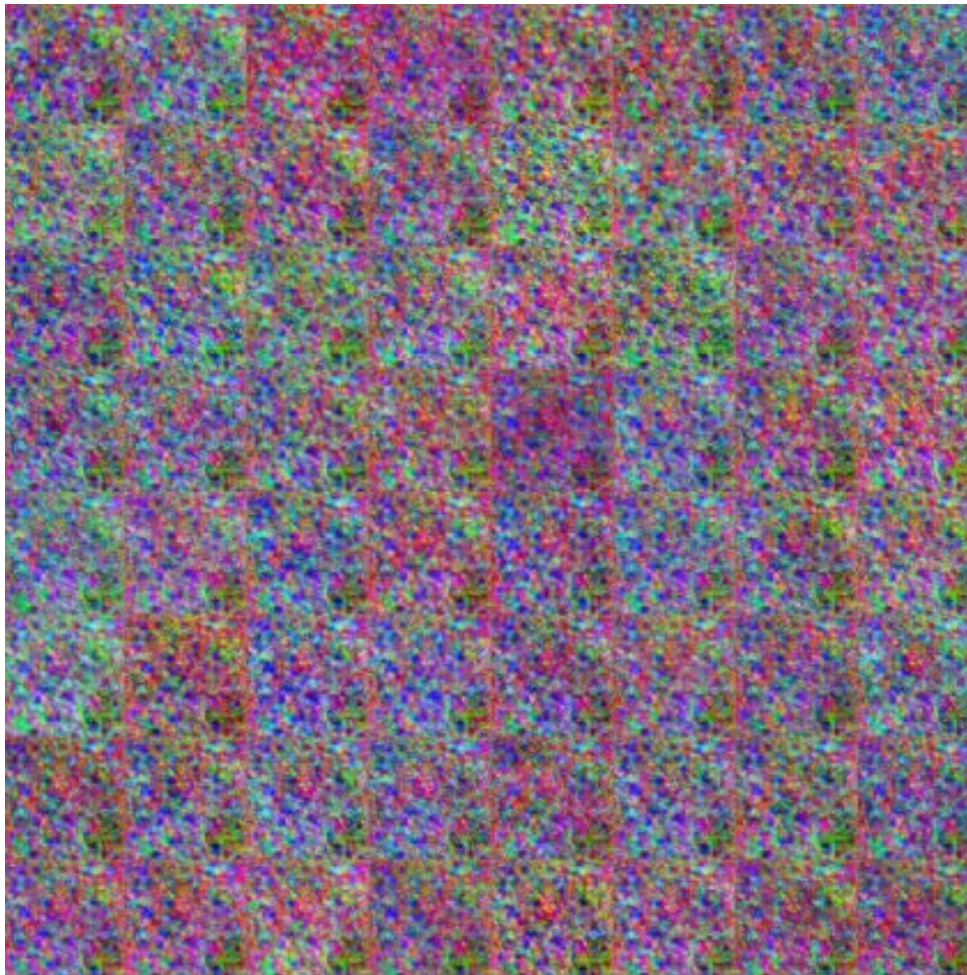


修改後



修改後

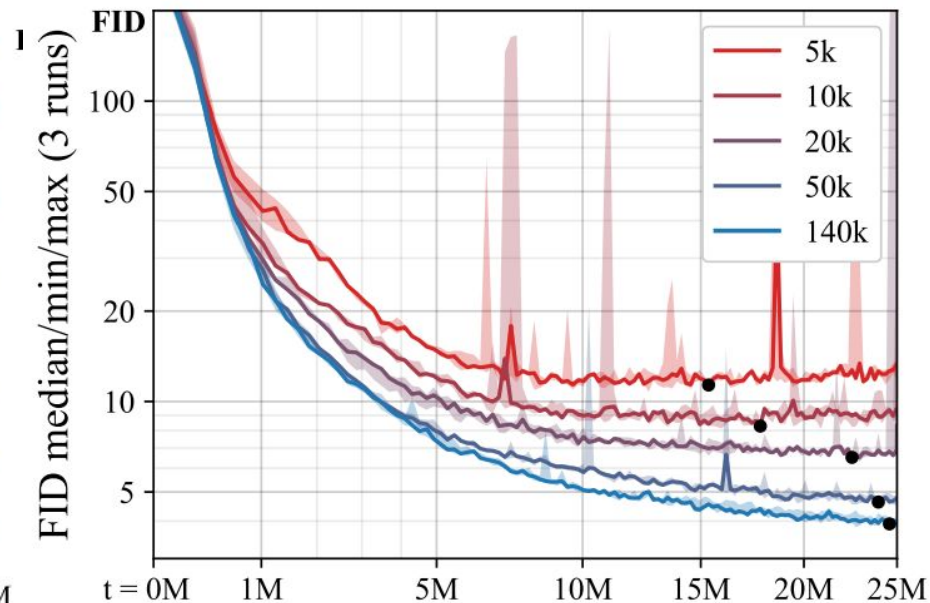
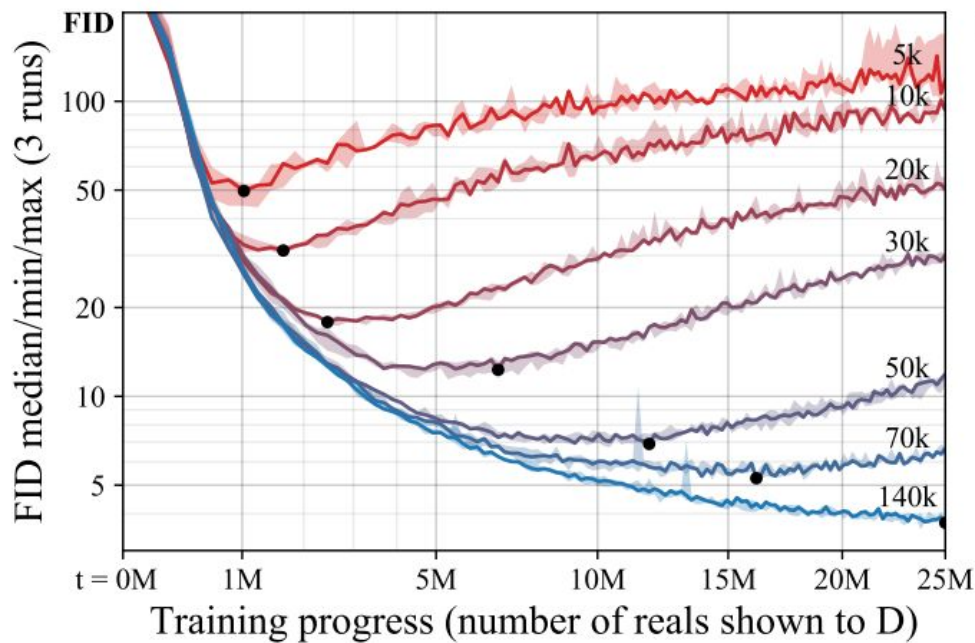
- 不同的 noise
- 不同的敘述



閱讀

- Style-GAN-2-ada (✓)
 - 運用少量資料達到好的成果
- Style-GAN-3 (✓)
 - 解決輪廓沾黏

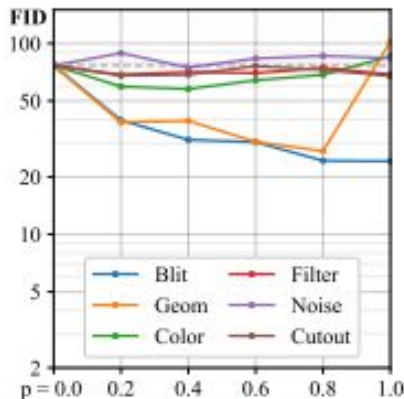
Style-GAN-2-ada



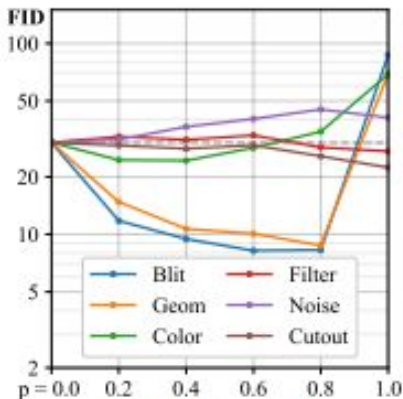
(a) With adaptive augmentation

問題

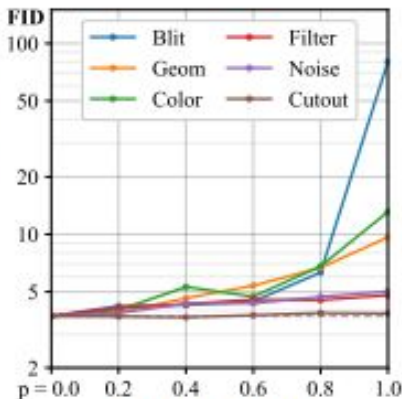
- with 140k the situation was markedly different: **all augmentations were harmful.**



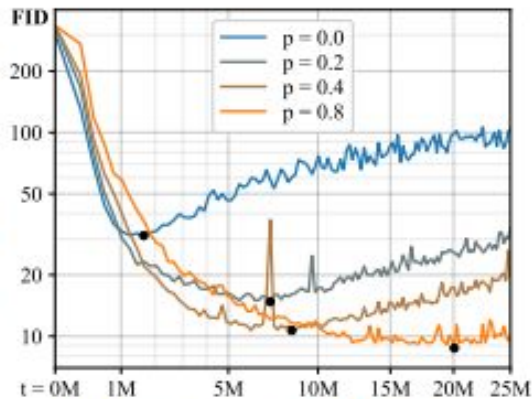
(a) FFHQ-2k



(b) FFHQ-10k



(c) FFHQ-140k



(d) Convergence, 10k, Geom