Parallels between painting and doing (math) research

Pierre-Cyril Aubin

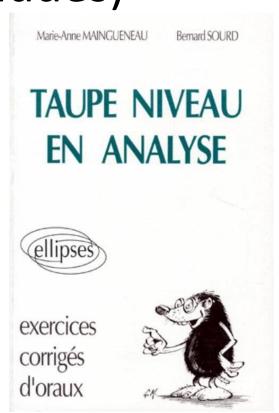
Retraite SIERRA/WILLOW, October 2022

Are you an artist?

- People cannot find purpose in what you do
- You try to be original
- You sign your work
- You have a notion of « beauty »
- You « produce », and there is a process:

Practicing through exercices, and « académie » (nudes)





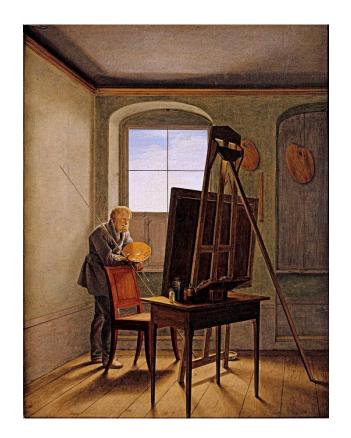
Originality: not repeating yourself

Avoid being the international expert of your master thesis



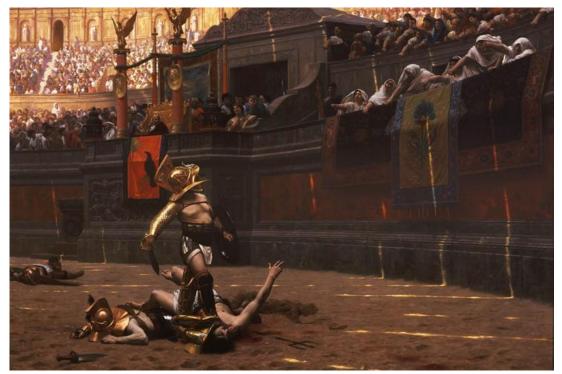


Material conditions





Truth and beauty: a matter of perception



Kernels



Neural networks

Publish or perish







« Vernissage » and galley proofs





« Salons » and ML conferences



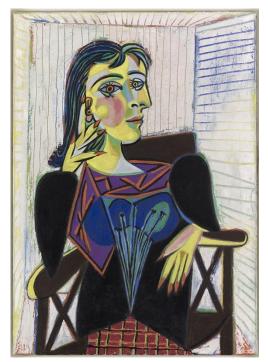
Publication strategies



Da Vinci < 20 paintings



Vermeer 36 paintings



Picasso 13,5k paintings

Publication strategies



Evariste Galois 6 articles



John Von Neumann 150 articles



Yoshua Bengio 1033 articles

DIY: co-signing and mass production

Rubens did over 1500 paintings with various categories:

- L. Done himself alone
 - Done partly himself
- 3. Retouched (Co-signed)

"another artist's work was by no means seen as an individual contribution to his paintings.

To the contrary, the only goal was to create stylistic conformity, namely in the style of the master himself"

"Your Excellency has taken only the originals, with which I am perfectly satisfied. Yet Your Excellency must not think that the others are mere copies, for they are so well retouched by my hand that they are hardly to be distinguished from originals. Nevertheless, they are rated at a much lower price" (Rubens)

From Patricia Schmiedlechner, A Study on the Creative Process and Studio Practice, **Modi Operandi in Rubens's Workshop**

Copycats: « inspiration » from old masters





« Nothing grows well in the shade of a big tree » Constantin Brancusi

Citations Soulages

https://www.arte.tv/fr/videos/073080-000-A/pierre-soulages/

Soulages, différence entre l'artiste et l'artisan "L'artisan sait très bien ce qu'il va faire, et comment y arriver, et bien moi c'est le contraire. Je ne sais pas ce que je vais faire, je sais vaguement comment je vais y arriver parce que je connais des tas de possibilités, mais je ne sais pas vraiment lesquelles je vais employer."

Soulages "ce que je fais m'apprend ce que je cherche" réaction de David Quéré, commentaire sur la recherche incrémentale qui ne prend pas de risque "quelque chose peut sortir de la démarche même, ce qui compte c'est le chemin"