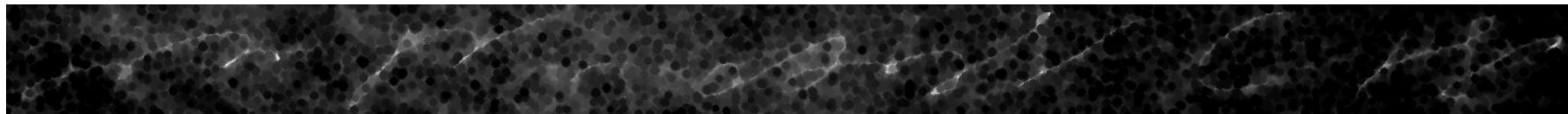# 5 - General Thoughts and Experiences from Implementing HTR Models

Preprocessing and Augmentations

- check the impact of your chosen parameters, especially the extremes

- e.g. erosion with a large structuring element may remove almost all traces of handwriting

Transcriptions

- clarify/decide standards and formats as early as possible

- any *type* of information that you want to recognise "in production" also has to be present during training

- should abbreviations be expanded or not?

- preserve vs fix spelling mistakes in original text?

- …

Training Data

- check if datasets, similar to yours, are available online
  - e.g. zenodo community: IAPR-TC11
    https://zenodo.org/communities/iapr-tc11

- consider trying "close enough" datasets, e.g.
  - Norwegian vs Swedish
  - 19th vs 20th century

- typewritten (and similar) texts
  - try pre-training on synthetic data, created from computer fonts + some artificial noise

Finetuning

- can give a considerable performance boost

- already have a model, trained on lots of data?
  → use it to kick-off your next recognition project!

- sometimes, finetuning on original train set can give a small boost as well

Training/Finetuning Iteratively

- train on small dataset

  - or use existing data/model from similar domain

- recognise new pages

- fix recognition mistakes

- train/finetune model on expanded dataset

Miscellaneous

- keep track of your training parameters
  - e.g. via config files
  - avoid changing parameters directly in the code → hard to keep track of (remember) and hard to reproduce!

- keep track of your environment

- whenever possible, consider sharing your models & data ;)