

# Which Representations Are Good?

Ideas for a start:

- Good representations allow to solve **some main** task.
  - ... but for this, the NN was trained in the first place.
- Good representations allow to solve **some other** task.
  - Pretrained word embeddings **may** be useful for other tasks.
- Good representations serve well on **task interfaces**.
  - Divide-and-conquer vs. end-to-end training.
  - Must divide training to make use of different data sources (e.g. spoken language translation needs ASR and MT data).
- Good representations **“make sense”**.
  - The representation of a specific **TEST SET** resembles something known.
  - Attaching a single layer to the representation gives a good accuracy in something, e.g. part-of-speech tags from sentence embeddings.