

# Simplification

Encoder-decoder framework – yes, but the network might learn just to **copy** the content... How do we force it to **simplify**?

Reinforcement learning can be used to do **weak supervision**.

- **Action:** output next word  $y_j$
- **Policy:**  $p(y_j | \mathbf{x}, y_1, \dots, y_{j-1})$
- **Reward:** Adequacy + Fluency + Simplicity

Rewards come only when the whole sequence is generated.

Zhang, Lapata. Sentence Simplification with Deep Reinforcement Learning, 2017.