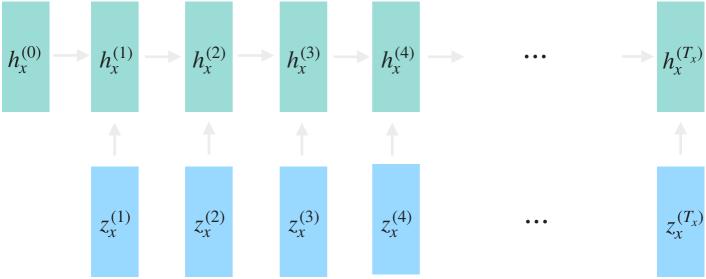
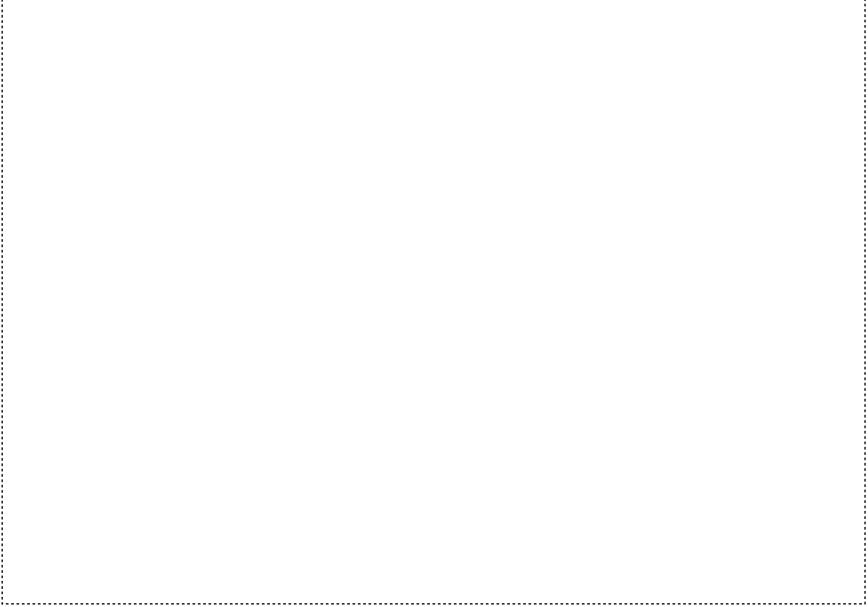
Sequence to sequence modeling







Encoder network

Decoder network



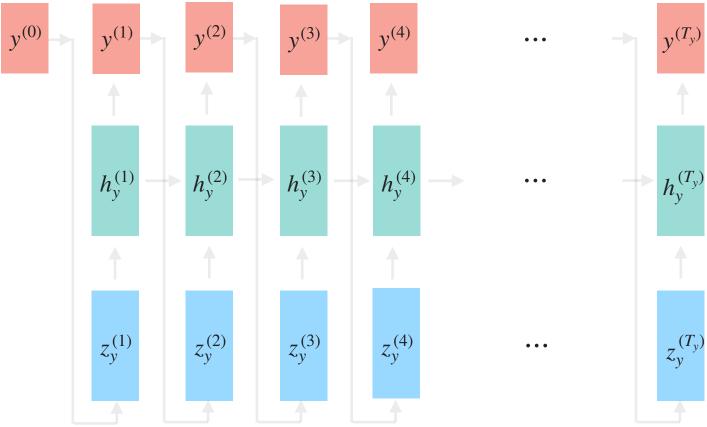
J'aime le café le matin

Neural Machine Translation (NMT)



I love coffee in the morning





I love coffee in the morning when I wake up.

Neural text generation



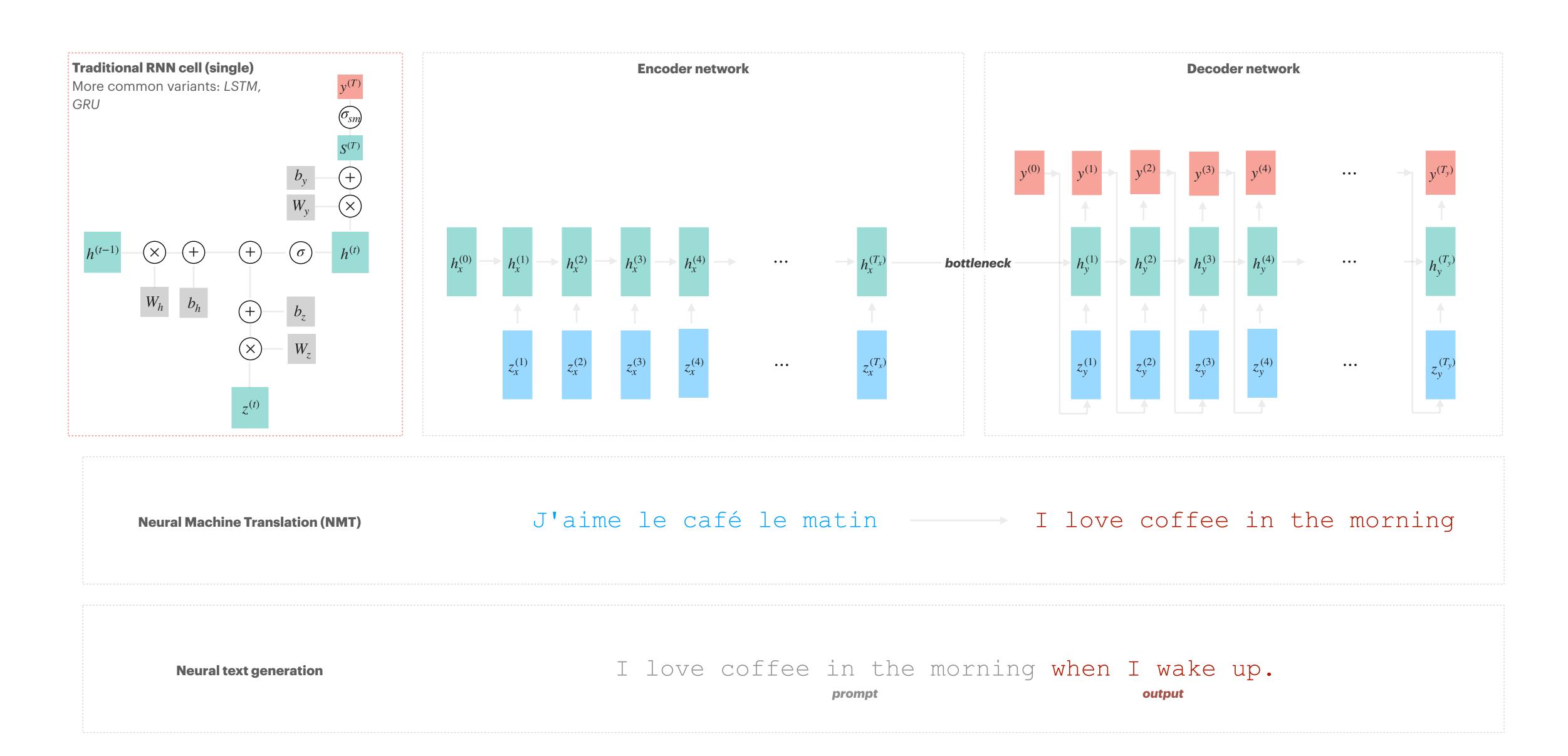




seq2seq was introduced by Sutsqever et al., Sequence to Sequence Learning with Neural Networks (2014)

Traditional RNN cell (single) More common variants: LSTM, **GRU** $S^{(T)}$ b_{y} $W_{\rm y}$ $h^{(t-1)}$ $h^{(t)}$ W_h b_h b_z W_z $z^{(t)}$

Sequence to sequence modeling



Attention based seq2seq models

