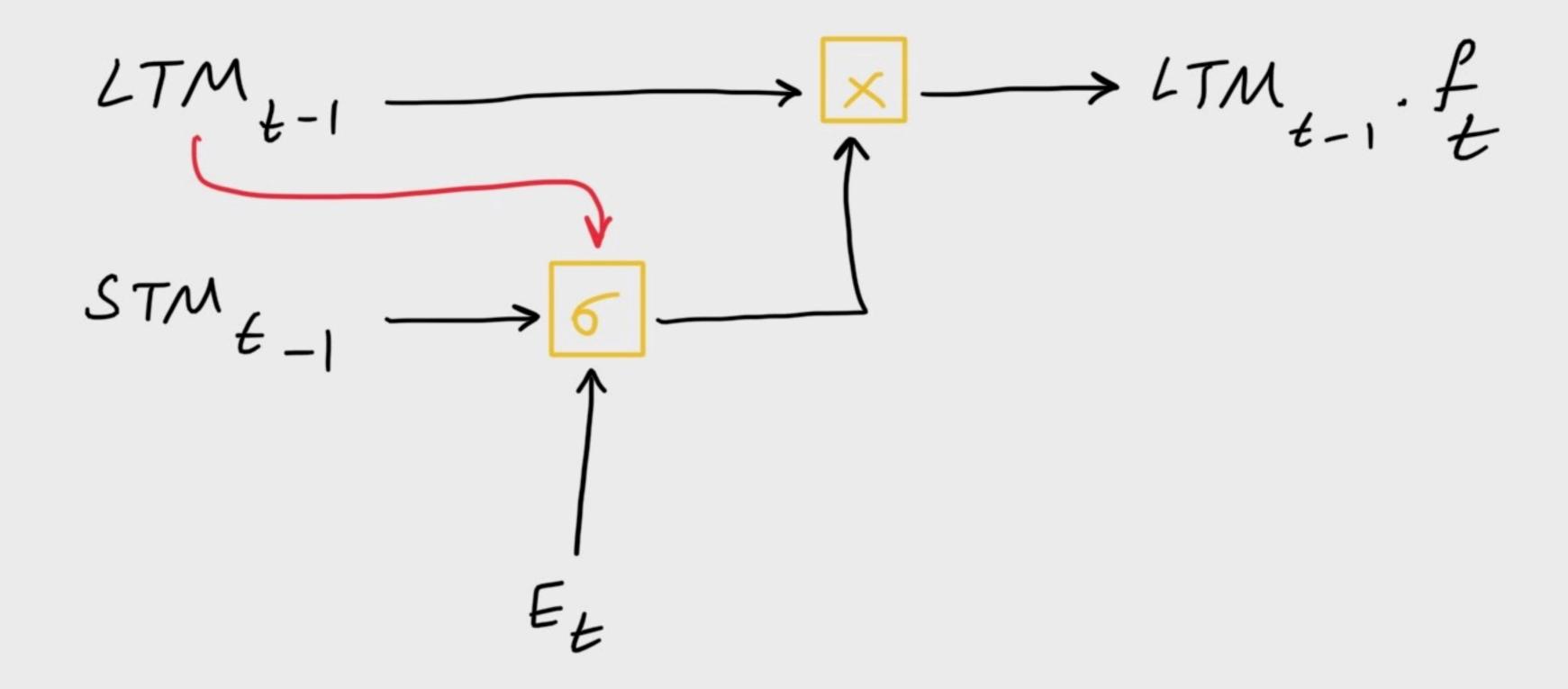
## Reephole Connections



W/ The added edge:  $f_{\xi} = 6 \left( N_{\xi} [LTM_{t-1}, STM_{t-1}, E_{\xi}] + b_{\xi} \right)$  we are trying to add  $LTM_{\xi-1}$  to the formula for computing the forget factor.

$$LTM \longrightarrow X \longrightarrow F$$

$$STM_{t-1}$$

$$E_{t}$$

$$E_{t}$$

We can add these peophole connection everywher

in the LSTM cell!

## Gated Recurrent Unit (GRU)

