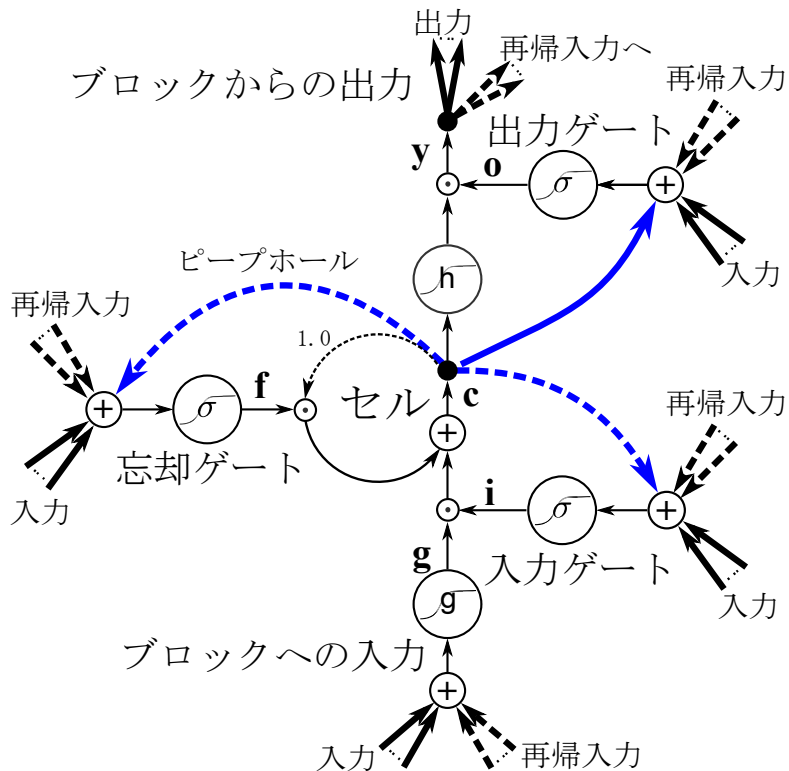


LSTM



$$\begin{aligned}
 i_t &= \sigma(W_{xi}x_t + W_{hi}h_{t-1} + b_i), \\
 f_t &= \sigma(W_{xf}x_t + W_{hf}h_{t-1} + b_f), \\
 o_t &= \sigma(W_{xo}x_t + W_{ho}h_{t-1} + b_o), \\
 g_t &= \phi(W_{xc}x_t + W_{hc}h_{t-1} + b_c), \\
 c_t &= f_t \odot c_{t-1} + i_t \odot g_t, \\
 y_t &= o_t \odot \phi(c_t)
 \end{aligned}$$