KL-loss: $P(Z|Xi) \sim N(0,1) \Rightarrow N(u,\sigma) \sim N(0,1)$, for encoder

$P(X|Z)$

u1 $\quad$ $N(u,\sigma)$ $\quad$ z1 $\quad$ x1'

σ1 $\quad$ sampling

x1 $\quad$ u2 $\quad$ $N(0,\sigma)$ $\quad$ z2 $\quad$ x2'

x2 $\quad$ σ2 $\quad$ sampling

x3 $\quad$ u3 $\quad$ $N(0,\sigma)$ $\quad$ z3 $\quad$ x3'

σ3 $\quad$ sampling
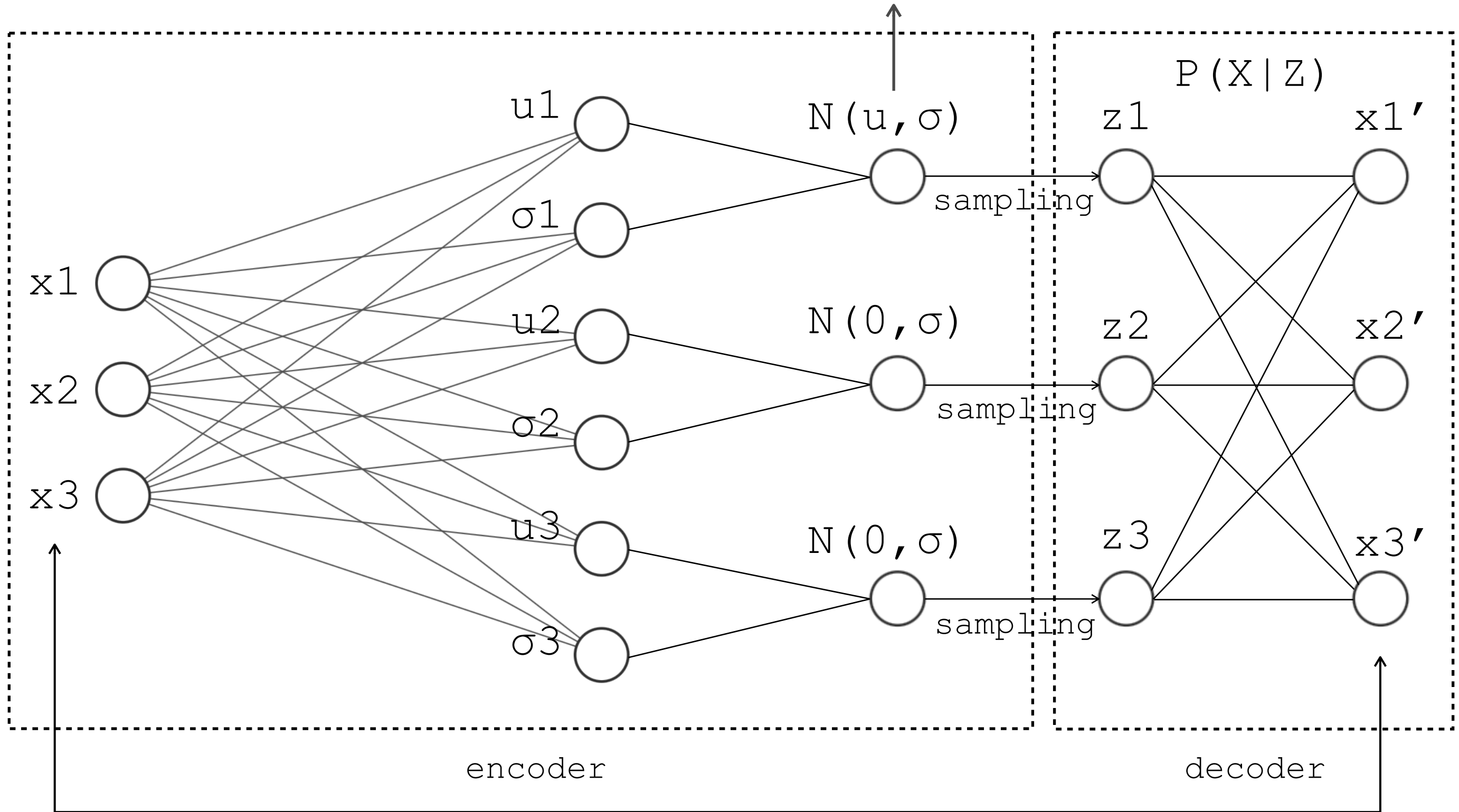
encoder $\qquad$ decoder

reconstruction loss: MSE => for decoder