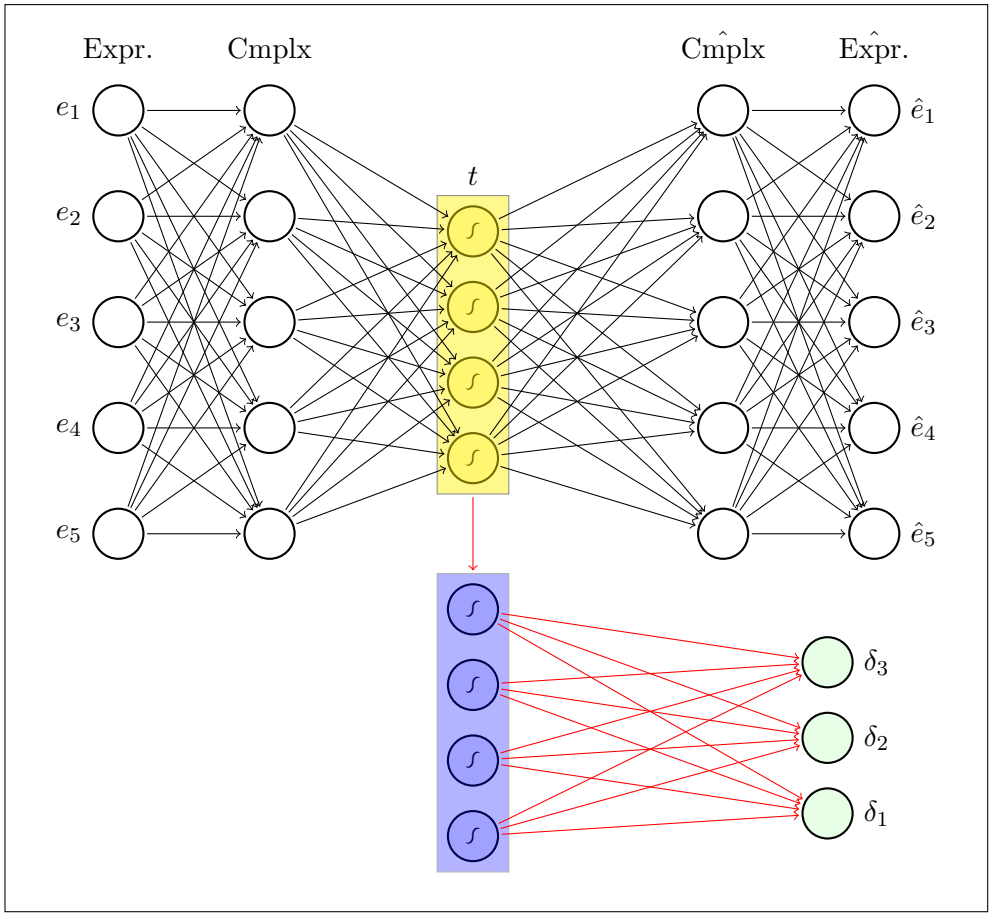


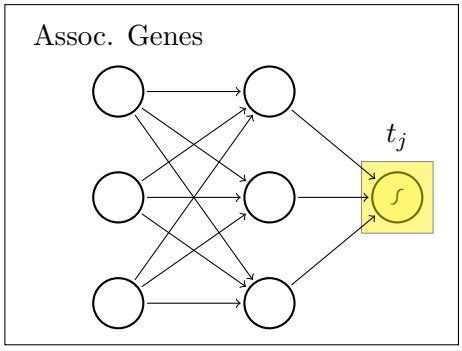
$$0 \leq t_j \leq 1\,; \qquad 1 \leq j \leq n \tag{1}$$

$$v_j = l_j + (u_j - l_j)t_j \tag{2}$$

$$Sv = Sl + S.diag(u_i - l_i).t = b + A.t \to 0 \tag{3}$$

$$\delta_i = (Sv)_i = a_i' t + b_i\,; \qquad 1 \leq i \leq m \tag{4}$$

$$loss = loss_{A.E.} + \lambda \|\delta\| \tag{5}$$



Alternative: using the exact number of complexes in the second layer, and the definite connections for each complex.