$$egin{array}{cccc} Z_1 & \xrightarrow{p(z_2|z_1)} & \cdots & \xrightarrow{p(z_{t-1}|z_{t-2})} & Z_{t-1} & \xrightarrow{p(z_t|z_{t-1})} & Z_t \ & & & & & & \downarrow p(x_{t-1}|z_{t-1}) & & & \downarrow p(x_t|z_t) \ & X_1 & & X_t & & X_t \end{array}$$