$$\alpha(z_{n-1,1}) \qquad \alpha(z_{n,1})$$

$$k = 1 \qquad A_{11} \qquad p(\mathbf{x}_n | z_{n,1})$$

$$\alpha(z_{n-1,2})$$

$$k = 2 \qquad A_{31} \qquad \alpha(z_{n-1,3})$$

$$k = 3 \qquad n \qquad n$$