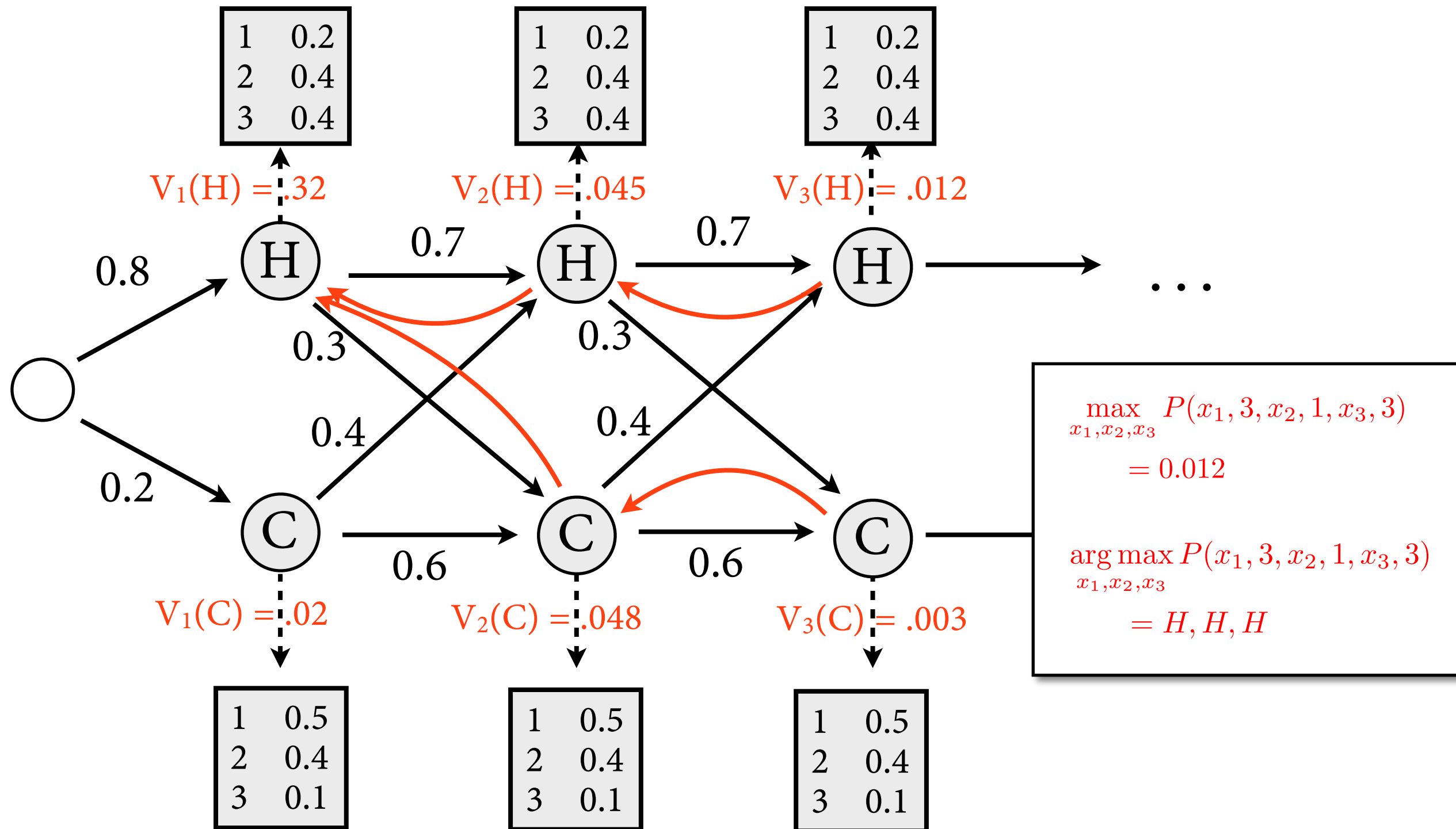


# Viterbi Algorithm: Example



$$V_t(j) = \max_{x_1, \dots, x_{t-1}} P(y_1, \dots, y_t, x_1, \dots, x_{t-1}, X_t = q_j)$$

$$V_t(j) = \max_{i=1}^N V_{t-1}(i) \cdot a_{ij} \cdot b_j(y_t)$$