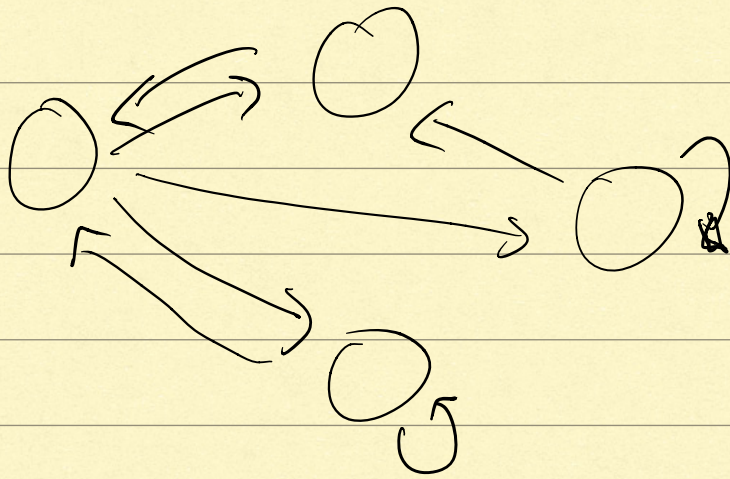


MARKOV CHAINS

RECAP:



$$\vec{p}(t) = M \cdot \vec{p}(t-1)$$

$$\begin{bmatrix} p_{1 \rightarrow 1} & & p_{3 \rightarrow 1} \\ & p_{2 \rightarrow 2} & \\ p_{1 \rightarrow 3} & & p_{3 \rightarrow 3} \end{bmatrix}$$

$$\vec{p}(t+1) = M \cdot \vec{p}(t)$$

RECAP:

MEAN TIME FROM k TO j

M_{-j} - MATRIX M BUT CROSS OUT

Row j & column j

$$\begin{bmatrix} -1 \\ -1 \\ -1 \\ -1 \\ -1 \end{bmatrix} = (M_{-j} - I) \cdot \vec{T}_{kj}$$

\downarrow

$$\begin{bmatrix} T_{1j} \\ T_{2j} \end{bmatrix}$$
