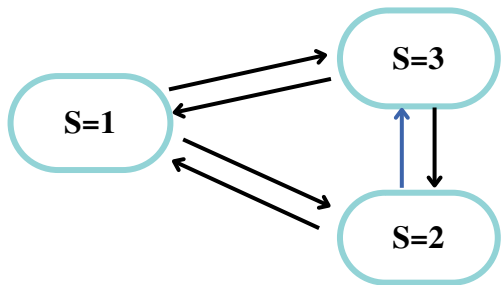


## A Hidden Semi-Markov Process



## B Transition Probability Matrix & State-specific duration distributions

		<i>To</i>		
		S=1	S=2	S=3
<i>From</i>	S=1	0	$\gamma_{12}$	$\gamma_{13}$
	S=2	$\gamma_{21}$	0	$\gamma_{23}$
	S=3	$\gamma_{31}$	$\gamma_{32}$	0

$$p_i(d) \sim \begin{cases} \text{LogN}(\mu_{[d]1}, \sigma_{[d]1}^2), & \text{for } S = 1 \\ \text{LogN}(\mu_{[d]2}, \sigma_{[d]2}^2), & \text{for } S = 2 \\ \text{LogN}(\mu_{[d]3}, \sigma_{[d]3}^2), & \text{for } S = 3 \end{cases}$$