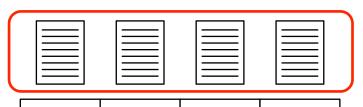
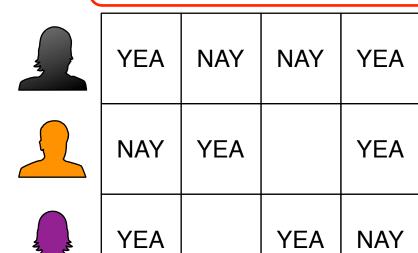
Legislator a votes 'Yea' on bill b with probability



Multi-dimensional ideal point of legislator a



	$/$ K \downarrow
$p(v_{a,b} = \text{Yea}) = \Phi$	$\left(x_b \sum_{k=1}^K u_{a,k} \vartheta_{b,k} + y_b\right)$
	k=1

Topic proportion of bill b estimated from its text