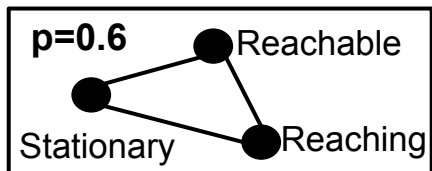
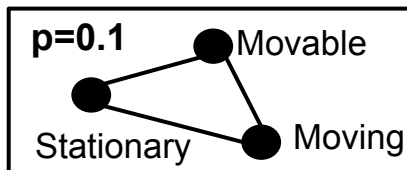


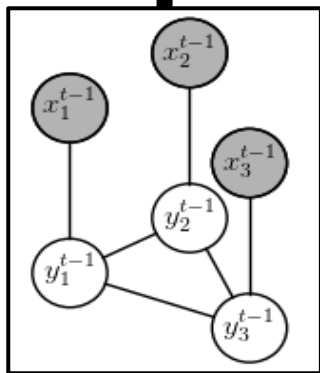
**Belief  $p(y^{t-1} | x^1, \dots, x^T)$**



⋮



**CRF likelihood**  $\uparrow$   $p(y^{t-1} | x^{t-1})$



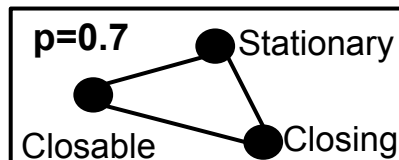
**Forward Messages**  
 $\alpha^t(y^t)$



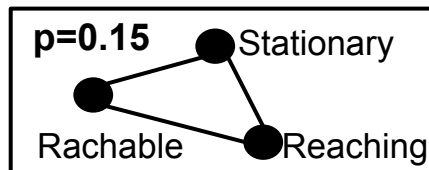
**Backward Messages**  
 $\beta^{t-1}(y^{t-1})$



**Belief  $p(y^t | x^1, \dots, x^T)$**



⋮



**CRF likelihood**  $\uparrow$   $p(y^t | x^t)$

