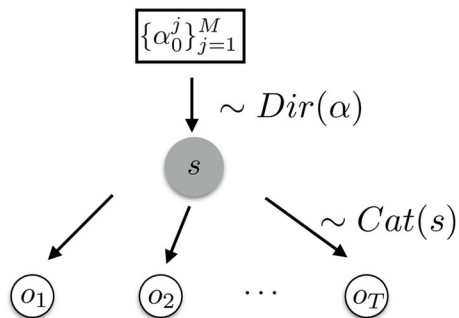
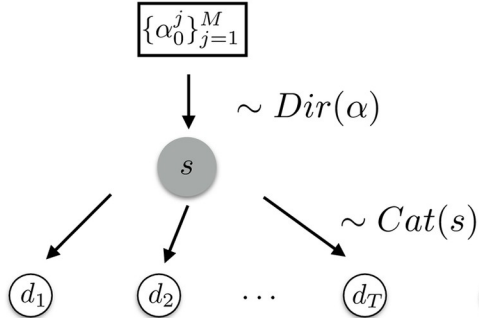


Stimulus Probability Model



Alternation Probability Model



Transition Probability Model

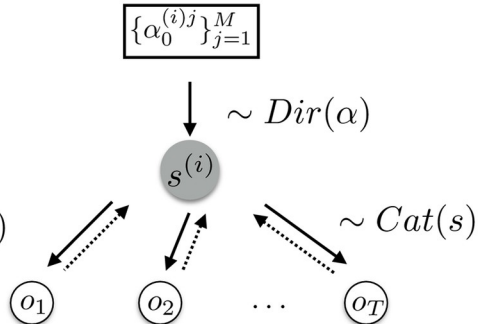


Fig 2. Dirichlet-Categorical model as a graphical model. Left: The stimulus probability model which tracks the hidden state vector determining the sampling process of the raw observations. Middle: The alternation probability model which infers the hidden state distribution based on alternations of the observations. Right: The transition probability model which assumes a different data-generating process based on the previous observations. Hence, it infers M sets of probability vectors α^i .