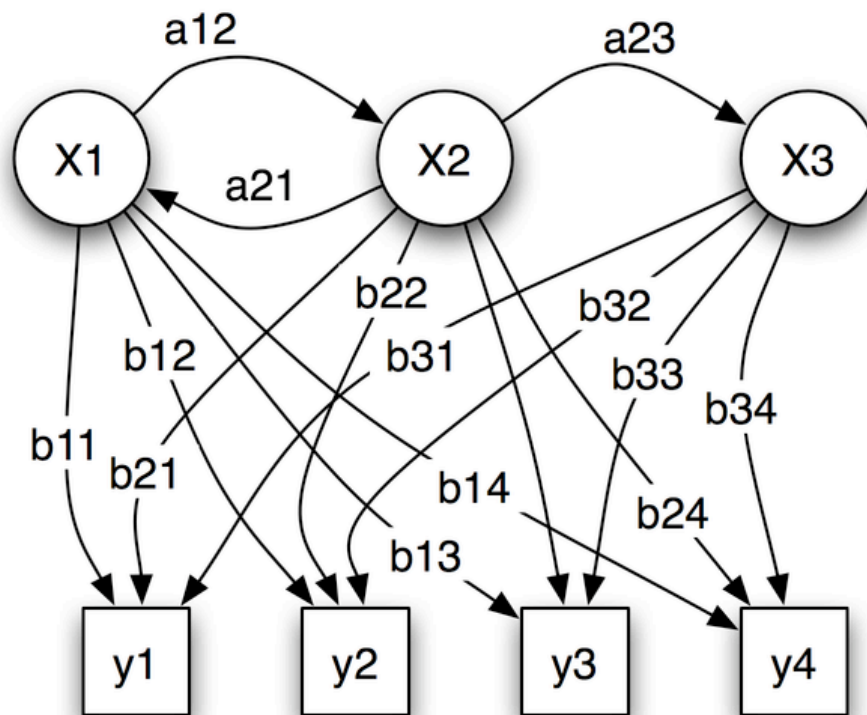


## Audio – Probability-based grouping

**HMM** is a statistical Markov model in which the system being modeled is assumed to be a Markov process with unobserved (*hidden*) states. An HMM can be considered as the simplest dynamic Bayesian network.



Probabilistic parameters of a hidden Markov model (example)

$x$  — states

$y$  — possible observations

$a$  — state transition probabilities

$b$  — output probabilities