Estimation of One Topic: $P(w | \theta_d)$

**Adjust θ_d to maximize $p(d|\Lambda)$
(all other parameters are known)**

Would the ML estimate <u>demote</u> background words in θ_d ?

d

… **text mining…**
is… **clustering…**
we…. **Text..** the

text ?
mining ?
association ?
clustering ?
…
the ?

θ_d

$p(\theta_d) + (\theta_B) = 1$

$P(\theta_d) = 0.5$

the 0.03
a 0.02
is 0.015
we 0.01
food 0.003
…
text 0.000006

θ_B

Topic Choice

$P(\theta_B) = 0.5$