The Idea of a Mixture Model

Mixture Model

"the"?

"text"?

w

$P(w|\theta_d)$

$p(w|\theta_B)$

text 0.04
mining 0.035
association 0.03
clustering 0.005
…
the 0.000001

θ_d

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

θ_B

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

$P(\theta_d)=0.5$

Topic Choice

$P(\theta_B)=0.5$

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