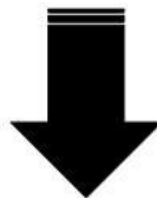| Document-Word Matrix	$w1$	$w2$	...	w_N
d_1	1	0	...	2
d_2	0	1	...	0
...	...	...	...	...
d_M	0	0	...	0

document-topic distributions	t_1	t_2	...	t_k
d_1	$P(t_1 \mid d_1)$			
d_2				
...				
d_M				$P(t_K \mid d_m)$

topic-word distributions	t_1	t_2	...	t_k
w_1	$P(w_1 \mid t_1)$			
w_2				
...				
W_N				$P(w_N \mid t_K)$