

Thế (1) vào (2):

$$\Rightarrow \sum_{w_i \in V} \frac{\text{count}(w_i, c_j)}{\lambda} = 1$$

$$\Leftrightarrow \frac{1}{\lambda} \sum_{w_i \in V} \text{count}(w_i, c_j) = 1$$

$$\Leftrightarrow \lambda = \sum_{w_i \in V} \text{count}(w_i, c_j)$$

$$\Rightarrow \hat{P}(w_i, c_j) = \frac{\text{count}(w_i, c_j)}{\lambda} = \frac{\text{count}(w_i, c_j)}{\sum_{w_i \in V} \text{count}(w_i, c_j)}$$

$$\text{hay } \hat{P}(w_i | c_j) = \frac{\text{count}(w_i, c_j)}{\sum_{w \in V} (\text{count}(w, c_j))} (dpcm)$$