

## Log-Linear Model (2)

As before, the constant denominator not needed in maximization:

$$\begin{aligned}\hat{e}_1^I &= \operatorname{argmax}_{I, e_1^I} \frac{\exp(\sum_{m=1}^M \lambda_m h_m(e_1^I, f_1^J))}{\sum_{e_1^{I'}} \exp(\sum_{m=1}^M \lambda_m h_m(e_1^{I'}, f_1^J))} \\ &= \operatorname{argmax}_{I, e_1^I} \exp(\sum_{m=1}^M \lambda_m h_m(e_1^I, f_1^J))\end{aligned}\quad (10)$$