

- Absolute discounting: subtract a fixed D from all non-zero counts

$$\alpha(w_n | w_1, \dots, w_{n-1}) = \frac{c(w_1, \dots, w_n) - D}{\sum_w c(w_1, \dots, w_{n-1}, w)}$$

- Refinement: three different discount values

$$D(c) = \begin{cases} D_1 & \text{if } c = 1 \\ D_2 & \text{if } c = 2 \\ D_{3+} & \text{if } c \geq 3 \end{cases}$$