$$p_I(w_1 n | w_1, ..., w_{n-1})$$

$$= \begin{cases} \alpha(w_n | w_1, ..., w_{n-1}) & \text{if } c(w_1, ..., w_n) > 0 \\ \gamma(w_1, ..., w_{n-1})\, p_I(w_n | w_2, ..., w_{n-1}) & \text{otherwise} \end{cases}$$