

Let's check the model

dog
dog cat tiger
cat dog cat

$$p(\text{cat dog cat}) = p(\text{cat} \mid _) p(\text{dog} \mid \text{cat}) p(\text{cat} \mid \text{dog})$$

<i>dog</i>	<i>cat tiger</i>	
	<i>cat dog cat</i>	<i>cat dog_</i>
	<i>cat</i> _	