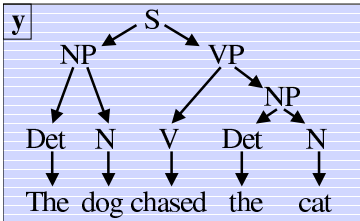


x The dog chased the cat

$f : X \rightarrow Y \downarrow$



$$\Psi(\mathbf{x}, \mathbf{y}) = \begin{pmatrix} 1 \\ 0 \\ 2 \\ 1 \\ \vdots \\ 0 \\ 2 \\ 1 \\ 1 \\ 1 \\ 1 \end{pmatrix} \begin{array}{l} S \rightarrow NP VP \\ S \rightarrow NP \\ NP \rightarrow Det N \\ VP \rightarrow V NP \\ \vdots \\ Det \rightarrow dog \\ Det \rightarrow the \\ N \rightarrow dog \\ V \rightarrow chased \\ N \rightarrow cat \end{array}$$