Input: la maison bleue

000
\<s\>
end=0
$s_1=1$

the

the
house

the
blue
house

blue

house

100
\<s\> the
end=1
$s_2=s_1 \cdot t_1 \cdot P(\text{the}|\text{<s>}) \cdot d(1\text{-}0\text{-}1)$

001
\<s\> blue
end=3
$s_8=s_1 \cdot t_2 \cdot P(\text{blue}|\text{<s>}) \cdot d(3\text{-}0\text{-}1)$

010
\<s\> house
end=2
$s_{13}=s_1 \cdot t_3 \cdot P(\text{house}|\text{<s>}) \cdot d(2\text{-}0\text{-}1)$

house

blue

the

house

the

blue

110
the house
end=2
$s_3=\max(s_2 \cdot t_3 \cdot P(\text{house}|\text{<s>}$ the$) \cdot d(2\text{-}1\text{-}1)$, $s_1 \cdot t_4 \cdot P(\text{the}|\text{<s>}) \cdot P(\text{house}|\text{<s>}$ the$) \cdot d(1\text{-}0\text{-}1))$

101
the blue
end=3
$s_5=s_2 \cdot t_2 \cdot P(\text{blue}|\text{<s>}$ the$) \cdot d(3\text{-}1\text{-}1)$

101
blue the
end=1
$s_9=s_8 \cdot t_1 \cdot P(\text{the}|\text{<s>}$ blue$) \cdot d(1\text{-}3\text{-}1)$

011
blue house
end=2
$s_{11}=s_8 \cdot t_3 \cdot P(\text{house}|\text{<s>}$ blue$) \cdot d(2\text{-}3\text{-}1)$

110
house the
end=1
$s_{14}=s_{13} \cdot t_1 \cdot P(\text{the}|\text{<s>}$ house$) \cdot d(1\text{-}2\text{-}1)$

011
house blue
end=3
$s_{15}=s_{13} \cdot t_2 \cdot P(\text{blue}|\text{<s>}$ house$) \cdot d(3\text{-}2\text{-}1)$

blue

house

house

the
house

the

blue

the

111
house blue
end=3
$s_4=s_3 \cdot t_2 \cdot P(\text{blue}|\text{the house}) \cdot d(3\text{-}2\text{-}1)$

111
blue house
end=2
$s_6=s_5 \cdot t_3 \cdot P(\text{house}|\text{the blue}) \cdot d(2\text{-}3\text{-}1)$

111
blue house
end=3
$s_7=s_1 \cdot t_5 \cdot P(\text{house}|\text{the blue}) \cdot P(\text{blue}|\text{<s>}$ the$) \cdot P(\text{the}|\text{<s>}) \cdot d(1\text{-}0\text{-}1)$

111
the house
end=2
$s_{10}=\max(s_9 \cdot t_3 \cdot P(\text{house}|\text{blue the}) \cdot d(2\text{-}1\text{-}1)$, $s_8 \cdot t_4 \cdot P(\text{the}|\text{<s>}$ blue$) \cdot P(\text{house}|\text{blue the}) \cdot d(1\text{-}3\text{-}1))$

111
house the
end=1
$s_{12}=s_{11} \cdot t_2 \cdot P(\text{the}|\text{blue house}) \cdot d(1\text{-}2\text{-}1)$

111
the blue
end=3
$s_{16}=s_{14} \cdot t_2 \cdot P(\text{blue}|\text{house the}) \cdot d(3\text{-}1\text{-}1)$

111
blue the
end=1
$s_{17}=s_{15} \cdot t_1 \cdot P(\text{the}|\text{house blue}) \cdot d(1\text{-}3\text{-}1)$
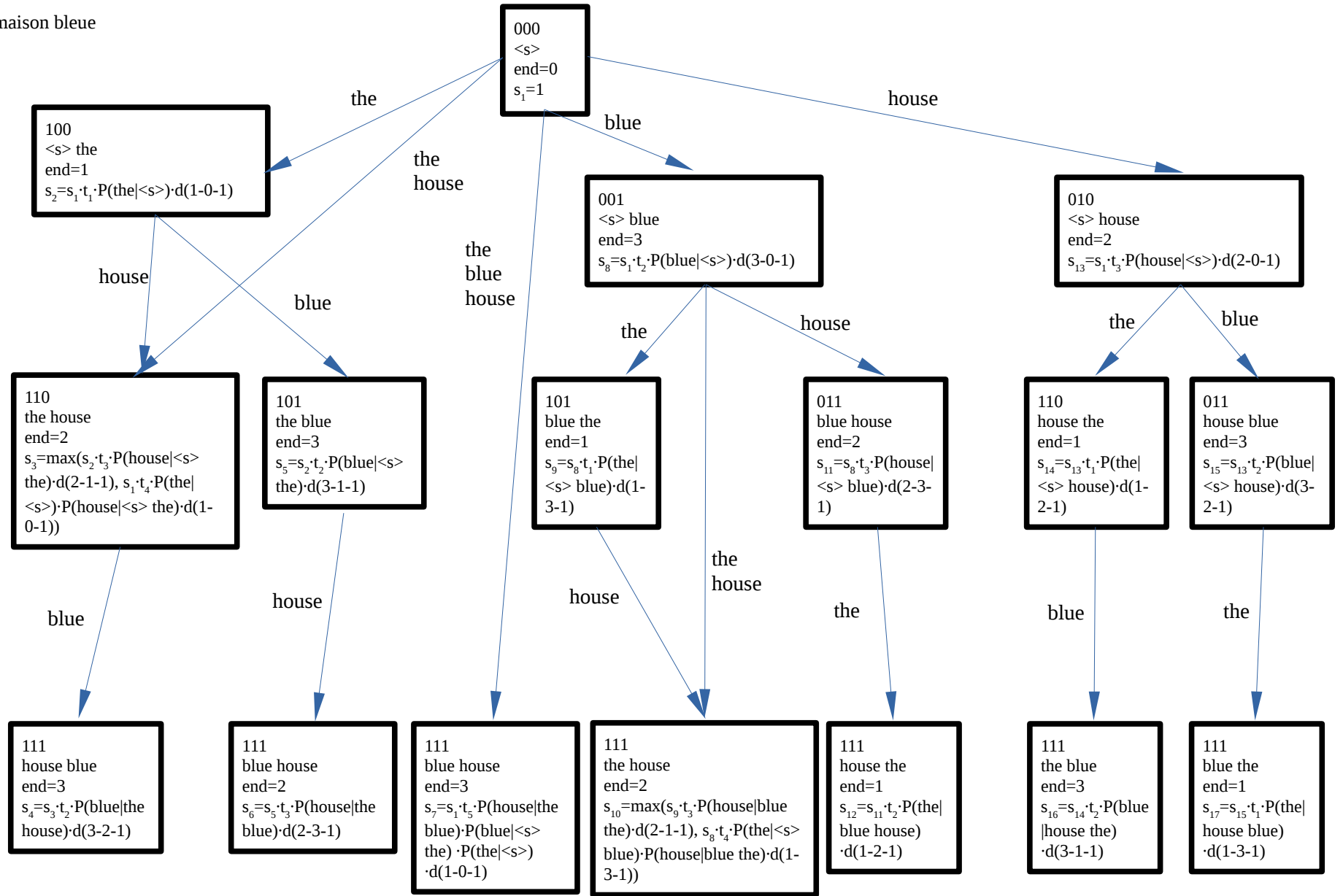
Of all complete hypotheses (coverage 111), the one with the highest score provides the best translation. Note that the end of the sentence is not modelled in this example graph.