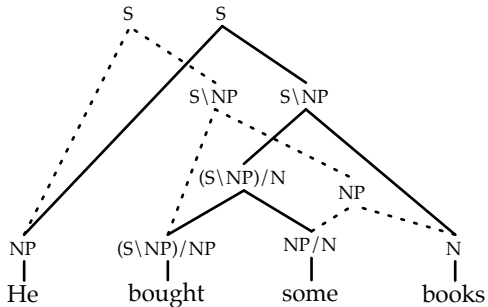


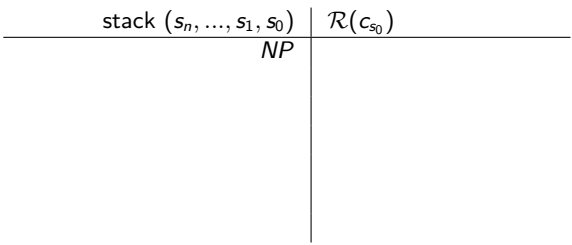
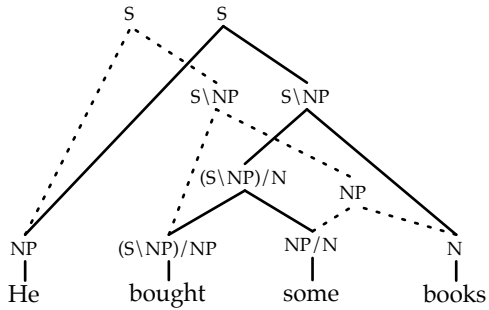
# The Dependency Model



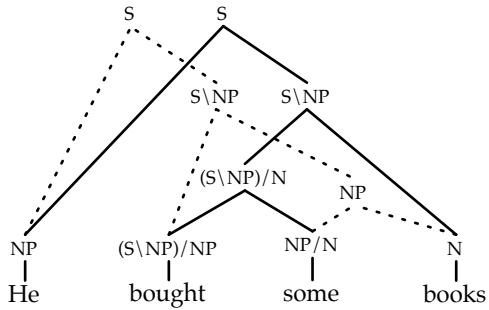
stack  $(s_n, \dots, s_1, s_0)$

$\mathcal{R}(c_{s_0})$

# The Dependency Model

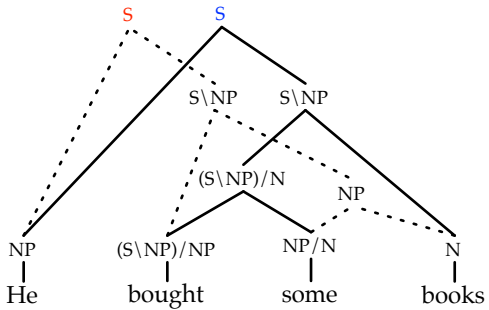


# The Dependency Model



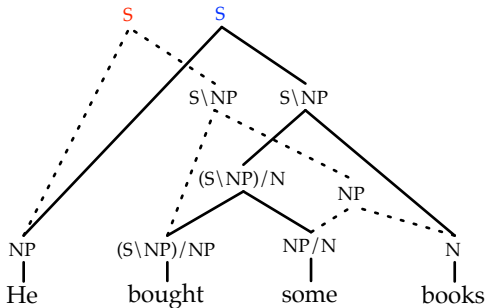
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()

# The Dependency Model



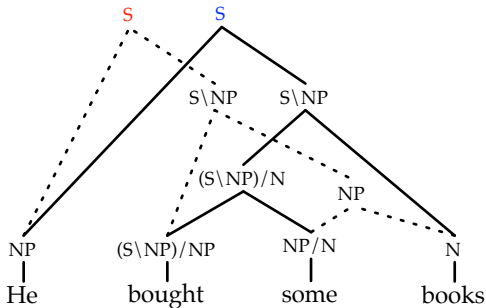
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	

# The Dependency Model



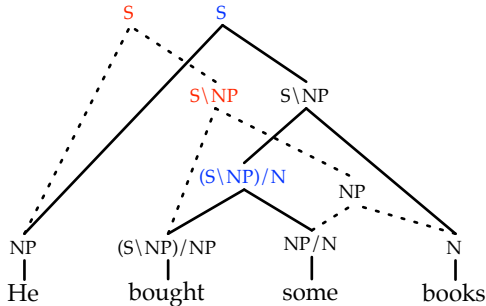
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<b>NP</b>	()
<b>NP (S\NP)/NP</b>	( <b>S</b> , <b>S</b> )

# The Dependency Model



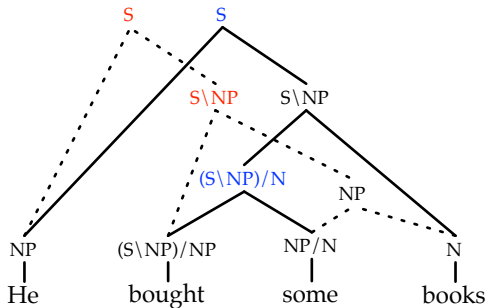
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <b>S</b> , <b>S</b> )
<i>NP (S\NP)/NP NP/N</i>	

# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <b>S</b> , <b>S</b> )
<i>NP (S\NP)/NP NP/N</i>	

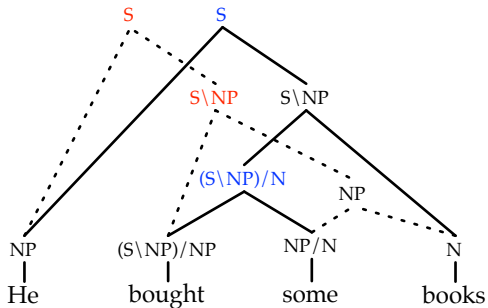
# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <i>S</i> , <i>S</i> )
<i>NP (S\NP)/NP NP/N</i>	( <i>S\NP</i> , ( <i>S\NP</i> )/ <i>N</i> )

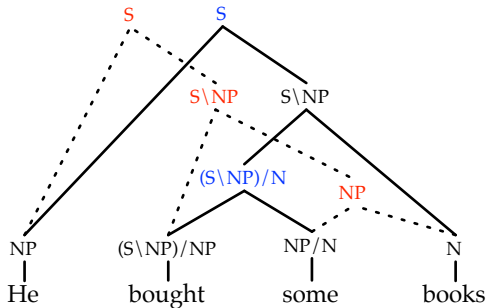


# The Dependency Model



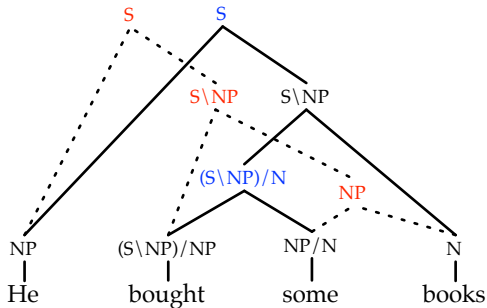
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S\backslash NP)/NP$	$(S, S)$
$NP (S\backslash NP)/NP NP/N$	$(S\backslash NP, (S\backslash NP)/N)$
$NP (S\backslash NP)/NP NP/N N$	

# The Dependency Model



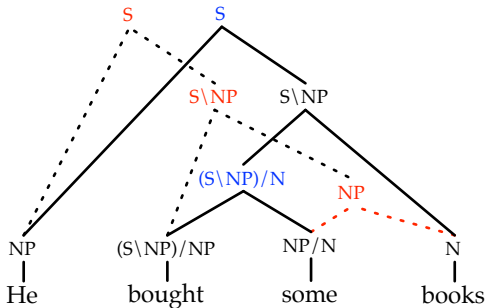
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <i>S</i> , <i>S</i> )
<i>NP (S\NP)/NP NP/N</i>	( <i>S\NP</i> , ( <i>S\NP</i> )/ <i>N</i> )
<i>NP (S\NP)/NP NP/N N</i>	

# The Dependency Model



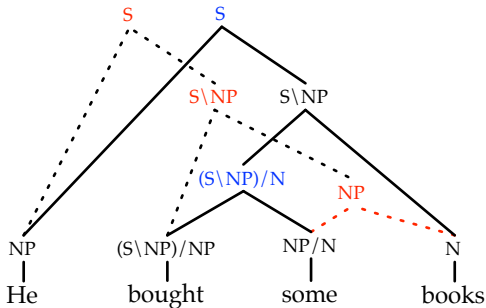
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <i>S</i> , <i>S</i> )
<i>NP (S\NP)/NP NP/N</i>	( <i>S\NP</i> , ( <i>S\NP</i> )/ <i>N</i> )
<i>NP (S\NP)/NP NP/N N</i>	( <i>NP</i> )

# The Dependency Model



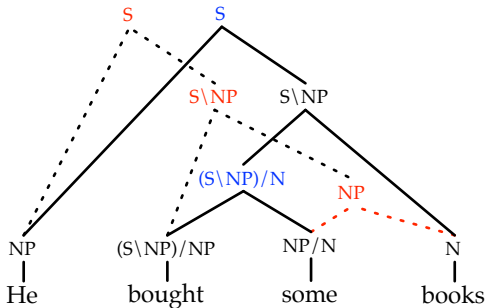
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S\backslash NP)/NP$	$(S, S)$
$NP (S\backslash NP)/NP NP/N$	$(S\backslash NP, (S\backslash NP)/N)$
$NP (S\backslash NP)/NP NP/N N$	$(NP)$
$NP (S\backslash NP)/NP NP$	

# The Dependency Model



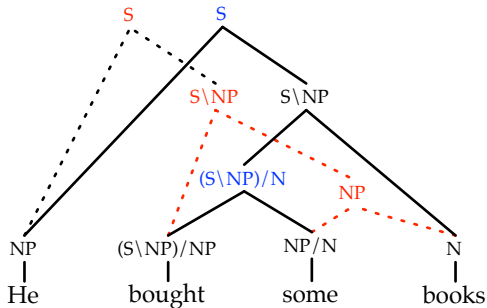
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S \setminus NP) / NP$	$(S, S)$
$NP (S \setminus NP) / NP NP / N$	$(S \setminus NP, (S \setminus NP) / N) \blacktriangleleft$
$NP (S \setminus NP) / NP NP / N N$	$(NP)$
$NP (S \setminus NP) / NP NP$	

# The Dependency Model



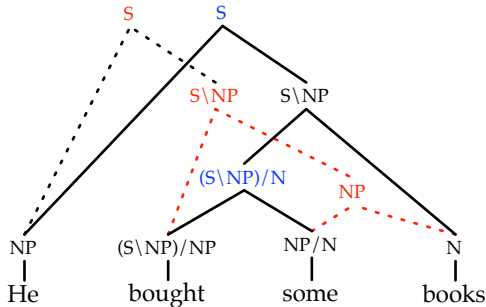
stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S \setminus NP)/NP$	$(S, S)$
$NP (S \setminus NP)/NP NP/N$	$(S \setminus NP, (S \setminus NP)/N)$
$NP (S \setminus NP)/NP NP/N N$	$(NP)$
$NP (S \setminus NP)/NP NP$	$(S \setminus NP)$

# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S\NP)/NP$	$(S, S)$
$NP (S\NP)/NP NP/N$	$(S\NP, (S\NP)/N)$
$NP (S\NP)/NP NP/N N$	$(NP)$
$NP (S\NP)/NP NP$	$(S\NP)$
$NP S\NP$	

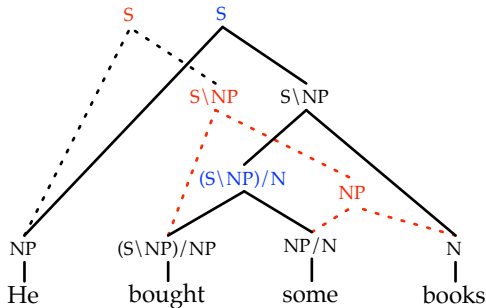
# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
<i>NP</i>	()
<i>NP (S\NP)/NP</i>	( <i>S, S</i> ) ◀
<i>NP (S\NP)/NP NP/N</i>	( <i>S\NP, (S\NP)/N</i> )
<i>NP (S\NP)/NP NP/N N</i>	( <i>NP</i> )
<i>NP (S\NP)/NP NP</i>	( <i>S\NP</i> )
<i>NP S\NP</i>	

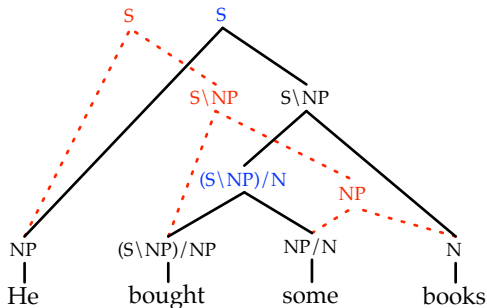


# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S\NP)/NP$	$(S, S)$
$NP (S\NP)/NP NP/N$	$(S\NP, (S\NP)/N)$
$NP (S\NP)/NP NP/N N$	$(NP)$
$NP (S\NP)/NP NP$	$(S\NP)$
$NP S\NP$	$(S)$

# The Dependency Model



stack ( $s_n, \dots, s_1, s_0$ )	$\mathcal{R}(c_{s_0})$
$NP$	$()$
$NP (S \setminus NP) / NP$	$(S, S)$
$NP (S \setminus NP) / NP NP / N$	$(S \setminus NP, (S \setminus NP) / N)$
$NP (S \setminus NP) / NP NP / N N$	$(NP)$
$NP (S \setminus NP) / NP NP$	$(S \setminus NP)$
$NP S \setminus NP$	$(S)$
$S$	$()$