

Project and attach probabilities (conditioned on left corner and goal slot)

l. corner	goal slot	P(attach)	Pr(FRAG2)	Pr(S2)	Pr(QP2)	Pr(ADVP2)	Pr(PP2)	Pr(S3)	Pr(NP3)	Pr
president	NP2-sl2	1	0	0	0	0	0	0	0	0
said	S2-sl2	0	0	0	0	0	0	0	0	0
said	S3-sl3	1	0	0	0	0	0	0	0	0
for	NP2-sl2	0	0	0	0	0	1	0	0	0
That	START-sl2	0	0	1	0	0	0	0	0	0
cluttered	ADJP2-sl2	1	0	0	0	0	0	0	0	0
no	VP4-sl2	0	0	0	0	0	0	0	0	1
no	VP2-sl2	0	0	0	0	0	0	0	0	1
its	VP2-sl2	0	0	0	0	0	0	0	0	0
story	NP3-sl3	1	0	0	0	0	0	0	0	0
of	NP2-sl2	0	0	0	0	0	1	0	0	0
stock	NP3-sl3	1	0	0	0	0	0	0	0	0
NP3	S2-sl2	1	0	0	0	0	0	0	0	0
NP3	PP2-sl2	1	0	0	0	0	0	0	0	0
NP3	START-sl2	0	0	1	0	0	0	0	0	0
NP3	VP2-sl2	1	0	0	0	0	0	0	0	0
NP2	FRAG2-sl2	1	0	0	0	0	0	0	0	0
NP2	ADVP2-sl2	1	0	0	0	0	0	0	0	0
NP2	PP2-sl2	1	0	0	0	0	0	0	0	0
NP2	S3-sl2	1	0	0	0	0	0	0	0	0
NP2	START-sl2	0	0	1	0	0	0	0	0	0
NP2	VP4-sl2	1	0	0	0	0	0	0	0	0
NP2	VP2-sl2	1	0	0	0	0	0	0	0	0
Barnum	NP2-sl2	1	0	0	0	0	0	0	0	0
page	NP4-sl4	1	0	0	0	0	0	0	0	0
NP4	START-sl2	0	0	0	0	0	0	0	0	1
NP4	VP2-sl2	1	0	0	0	0	0	0	0	0
ADJP2	VP2-sl2	1	0	0	0	0	0	0	0	0
on	NP2-sl2	0	0	0	0	0	1	0	0	0
on	VP2-sl2	0	0	0	0	0	1	0	0	0
But	START-sl2	0	0	0	0	0	0	1	0	0
year	NP2-sl2	1	0	0	0	0	0	0	0	0
attracts	S2-sl2	0	0	0	0	0	0	0	0	0
There	START-sl2	0	0	1	0	0	0	0	0	0
%	NP2-sl2	1	0	0	0	0	0	0	0	0
Computer	NP2-sl2	1	0	0	0	0	0	0	0	0
Previously	START-sl2	0	0	0	0	0	0	1	0	0
he	S3-sl2	1	0	0	0	0	0	0	0	0
1990	NP4-sl2	1	0	0	0	0	0	0	0	0
PP2	START-sl2	0	0	0	0	0	0	1	0	0
PP2	NP2-sl2	1	0	0	0	0	0	0	0	0
PP2	VP4-sl3	1	0	0	0	0	0	0	0	0
PP2	VP3-sl2	1	0	0	0	0	0	0	0	0

PP2	VP2-sl2	1	0	0	0	0	0	0	0
50.38	PP2-sl2	0	0	0	1	0	0	0	0
price	NP2-sl2	1	0	0	0	0	0	0	0
U.S.	START-sl2	0	0	0	0	0	0	0	0
scenario	NP3-sl3	1	0	0	0	0	0	0	0
Lorillard	NP3-sl2	1	0	0	0	0	0	0	0
now	VP4-sl4	1	0	0	0	0	0	0	0
will	S2-sl2	0	0	0	0	0	0	0	0
will	S3-sl3	0	0	0	0	0	0	0	0
bearing	NP2-sl2	1	0	0	0	0	0	0	0
Champagne	START-sl2	0	0	0	0	0	0	0	1
A	START-sl2	0	0	0	0	0	0	0	1
19	ADVP2-sl2	0	0	0	0	0	0	0	0
announce	VP2-sl2	0	0	0	0	0	0	0	0
followed	S2-sl2	1	0	0	0	0	0	0	0
This	VP2-sl2	0	0	1	0	0	0	0	0
100,980	VP2-sl2	1	0	0	0	0	0	0	0
paid	VP2-sl2	0	0	0	0	0	0	0	0
hard	VP2-sl2	0	0	0	0	0	0	0	0
products	NP2-sl2	1	0	0	0	0	0	0	0
a	S2-sl2	0	0	0	0	0	0	0	1
a	VP2-sl2	0	0	0	0	0	0	0	1
rates	NP4-sl4	1	0	0	0	0	0	0	0
No	START-sl2	0	0	0	0	0	0	0	0
up	VP3-sl3	0	0	0	0	1	0	0	0
Nasdaq	PP2-sl2	1	0	0	0	0	0	0	0
field	NP2-sl2	1	0	0	0	0	0	0	0
new	NP3-sl2	1	0	0	0	0	0	0	0
Newsweek	PP2-sl2	1	0	0	0	0	0	0	0
force	NP3-sl3	1	0	0	0	0	0	0	0
yet	VP3-sl2	1	0	0	0	0	0	0	0
to	ADJP2-sl2	0	0	0	0	0	0	0	0
to	VP3-sl3	0	0	0	0	0	0	0	0
to	VP2-sl2	0	0	0	0	0	0	0	0
old	NP3-sl2	1	0	0	0	0	0	0	0
asbestos	NP2-sl2	1	0	0	0	0	0	0	0
S2	START-sl2	0	0	0	0	0	0	1	0
S2	VP2-sl2	1	0	0	0	0	0	0	0
240,000	VP2-sl2	1	0	0	0	0	0	0	0
Edison	NP2-sl2	1	0	0	0	0	0	0	0
All	START-sl2	0	0	1	0	0	0	0	0
News	NP2-sl2	1	0	0	0	0	0	0	0
ADVP2	VP3-sl3	1	0	0	0	0	0	0	0
been	VP2-sl2	0	0	0	0	0	0	0	0
has	S2-sl2	0	0	0	0	0	0	0	0
were	S2-sl2	0	0	0	0	0	0	0	0

Research	NP2-sl2	1	0	0	0	0	0	0	0	0
dessert	NP3-sl3	1	0	0	0	0	0	0	0	0
be	VP2-sl2	0	0	0	0	0	0	0	0	0
work	NP3-sl2	1	0	0	0	0	0	0	0	0
billion	QP2-sl2	1	0	0	0	0	0	0	0	0
Cray	PP2-sl2	0	0	0	0	0	0	0	0	0
Cray	START-sl2	0	0	0	0	0	0	0	0	0
cost	VP2-sl2	0	0	0	0	0	0	0	0	0
and	NP3-sl2	1	0	0	0	0	0	0	0	0
shares	NP3-sl3	1	0	0	0	0	0	0	0	0
that	VP2-sl2	0	0	1	0	0	0	0	0	0
Mr.	S3-sl2	0	0	0	0	0	0	0	0	0
called	S3-sl3	0	0	0	0	0	0	0	0	0
got	S2-sl2	0	0	0	0	0	0	0	0	0
this	FRAG2-sl2	0	0	0	0	0	0	0	0	0
concept	NP3-sl2	1	0	0	0	0	0	0	0	0
trade	VP2-sl2	0	0	0	0	0	0	0	0	0
vice	VP2-sl2	0	0	0	0	0	0	0	0	0
At	START-sl2	0	0	0	0	0	1	0	0	0
set	VP2-sl2	1	0	0	0	0	0	0	0	0
Eastern	PP2-sl2	0	0	0	0	0	0	0	0	0
today	NP2-sl2	1	0	0	0	0	0	0	0	0
from	VP2-sl2	0	0	0	0	0	1	0	0	0
It	START-sl2	0	0	1	0	0	0	0	0	0
was	S3-sl3	0	0	0	0	0	0	0	0	0
full	NP4-sl2	1	0	0	0	0	0	0	0	0
Imports	START-sl2	0	0	1	0	0	0	0	0	0
four	NP4-sl3	1	0	0	0	0	0	0	0	0
attention	VP2-sl2	1	0	0	0	0	0	0	0	0
less	VP2-sl2	0	0	0	0	0	0	0	0	0
is	S2-sl2	0	0	0	0	0	0	0	0	0
is	S3-sl3	0	0	0	0	0	0	0	0	0
added	S3-sl3	1	0	0	0	0	0	0	0	0
worst	NP3-sl2	1	0	0	0	0	0	0	0	0
at	VP3-sl2	0	0	0	0	0	1	0	0	0
Now	START-sl2	0	0	0	0	0	0	1	0	0
the	PP2-sl2	0	0	0	0	0	0	0	1	0
the	S3-sl2	0	0	0	0	0	0	0	0	0
came	S2-sl2	0	0	0	0	0	0	0	0	0
in	NP2-sl2	0	0	0	0	0	1	0	0	0
in	VP4-sl3	0	0	0	0	0	1	0	0	0
spokewoman	NP3-sl3	1	0	0	0	0	0	0	0	0
Not	START-sl2	0	1	0	0	0	0	0	0	0
S3	START-sl2	0	0	0	0	0	0	1	0	0
take	VP2-sl2	1	0	0	0	0	0	0	0	0
an	VP2-sl2	0	0	0	0	0	0	0	1	0

applied	VP2-sl2	0	0	0	0	0	0	0	0
ad	NP4-sl3	1	0	0	0	0	0	0	0
VP4	S2-sl2	1	0	0	0	0	0	0	0
our	PP2-sl2	0	0	0	0	0	0	0	1
VP3	S2-sl2	1	0	0	0	0	0	0	0
VP2	S2-sl2	1	0	0	0	0	0	0	0
VP2	S3-sl3	1	0	0	0	0	0	0	0
VP2	VP3-sl3	1	0	0	0	0	0	0	0
VP2	VP2-sl2	1	0	0	0	0	0	0	0

Table 1: Project and attach probabilities computed from that are shared by left corner and corresponding goal slot

Project and attach probabilities (conditioned on left corner and goal slot)

l. corner	goal slot	P(attach)	Pr(FRAG2)	Pr(S2)	Pr(QP2)	Pr(ADVP2)	Pr(PP2)	Pr(S3)	Pr(NP3)	Pr(NP4)
president	NP2-sl2	1	0	0	0	0	0	0	0	0
said	S2-sl2	0	0	0	0	0	0	0	0	0
said	S3-sl3	1	0	0	0	0	0	0	0	0
for	NP2-sl2	0	0	0	0	0	1	0	0	0
That	START-sl2	0	0	1	0	0	0	0	0	0
cluttered	ADJP2-sl2	1	0	0	0	0	0	0	0	0
no	VP4-sl2	0	0	0	0	0	0	0	0	1
no	VP2-sl2	0	0	0	0	0	0	0	0	1
its	VP2-sl2	0	0	0	0	0	0	0	0	0
QP2	PP2-sl2	1	0	0	0	0	0	0	0	0
story	NP3-sl3	1	0	0	0	0	0	0	0	0
of	NP2-sl2	0	0	0	0	0	1	0	0	0
stock	NP3-sl3	1	0	0	0	0	0	0	0	0
NP3	S2-sl2	1	0	0	0	0	0	0	0	0
NP3	PP2-sl2	0.5	0	0	0	0	0	0	0	0.5
NP3	START-sl2	0	0	1	0	0	0	0	0	0
NP3	VP2-sl2	1	0	0	0	0	0	0	0	0
NP2	FRAG2-sl2	1	0	0	0	0	0	0	0	0
NP2	ADVP2-sl2	1	0	0	0	0	0	0	0	0
NP2	PP2-sl2	1	0	0	0	0	0	0	0	0
NP2	S3-sl2	1	0	0	0	0	0	0	0	0
NP2	START-sl2	0	0	1	0	0	0	0	0	0
NP2	VP4-sl2	1	0	0	0	0	0	0	0	0
NP2	VP2-sl2	0.667	0	0	0	0	0	0	0	0
Barnum	NP2-sl2	1	0	0	0	0	0	0	0	0
page	NP4-sl4	1	0	0	0	0	0	0	0	0
NP4	START-sl2	0	0	0	0	0	0	0	0	1
NP4	VP2-sl2	1	0	0	0	0	0	0	0	0
ADJP2	VP2-sl2	1	0	0	0	0	0	0	0	0
on	NP2-sl2	0	0	0	0	0	1	0	0	0

on	VP2-sl2	0	0	0	0	0	1	0	0	0
But	START-sl2	0	0	0	0	0	0	1	0	0
year	NP2-sl2	1	0	0	0	0	0	0	0	0
attracts	S2-sl2	0	0	0	0	0	0	0	0	0
FRAG2	START-sl2	1	0	0	0	0	0	0	0	0
There	START-sl2	0	0	1	0	0	0	0	0	0
%	NP2-sl2	1	0	0	0	0	0	0	0	0
Computer	NP2-sl2	1	0	0	0	0	0	0	0	0
Previously	START-sl2	0	0	0	0	0	0	1	0	
he	S3-sl2	1	0	0	0	0	0	0	0	
1990	NP4-sl2	1	0	0	0	0	0	0	0	
PP2	START-sl2	0	0	0	0	0	0	1	0	
PP2	NP2-sl2	1	0	0	0	0	0	0	0	
PP2	VP4-sl3	1	0	0	0	0	0	0	0	
PP2	VP3-sl2	1	0	0	0	0	0	0	0	
PP2	VP2-sl2	1	0	0	0	0	0	0	0	
50.38	PP2-sl2	0	0	0	1	0	0	0	0	
price	NP2-sl2	1	0	0	0	0	0	0	0	
U.S.	START-sl2	0	0	0	0	0	0	0	0	
scenario	NP3-sl3	1	0	0	0	0	0	0	0	
Lorillard	NP3-sl2	1	0	0	0	0	0	0	0	
now	VP4-sl4	1	0	0	0	0	0	0	0	
will	S2-sl2	0	0	0	0	0	0	0	0	
will	S3-sl3	0	0	0	0	0	0	0	0	
bearing	NP2-sl2	1	0	0	0	0	0	0	0	
Champagne	START-sl2	0	0	0	0	0	0	0	1	
A	START-sl2	0	0	0	0	0	0	0	1	
19	ADVP2-sl2	0	0	0	0	0	0	0	0	
announce	VP2-sl2	0	0	0	0	0	0	0	0	
followed	S2-sl2	1	0	0	0	0	0	0	0	
This	VP2-sl2	0	0	1	0	0	0	0	0	
100,980	VP2-sl2	1	0	0	0	0	0	0	0	
paid	VP2-sl2	0	0	0	0	0	0	0	0	
hard	VP2-sl2	0	0	0	0	0	0	0	0	
products	NP2-sl2	1	0	0	0	0	0	0	0	
a	S2-sl2	0	0	0	0	0	0	0	1	
a	VP2-sl2	0	0	0	0	0	0	0	1	
rates	NP4-sl4	1	0	0	0	0	0	0	0	
No	START-sl2	0	0	0	0	0	0	0	0	
up	VP3-sl3	0	0	0	0	1	0	0	0	
Nasdaq	PP2-sl2	1	0	0	0	0	0	0	0	
field	NP2-sl2	1	0	0	0	0	0	0	0	
new	NP3-sl2	1	0	0	0	0	0	0	0	
Newsweek	PP2-sl2	1	0	0	0	0	0	0	0	
force	NP3-sl3	1	0	0	0	0	0	0	0	
yet	VP3-sl2	1	0	0	0	0	0	0	0	

to	ADJP2-sl2	0	0	0	0	0	0	0	0
to	VP3-sl3	0	0	0	0	0	0	0	0
to	VP2-sl2	0	0	0	0	0	0	0	0
old	NP3-sl2	1	0	0	0	0	0	0	0
asbestos	NP2-sl2	1	0	0	0	0	0	0	0
S2	START-sl2	0.917	0	0	0	0	0	0.083	0
S2	VP2-sl2	1	0	0	0	0	0	0	0
240,000	VP2-sl2	1	0	0	0	0	0	0	0
Edison	NP2-sl2	1	0	0	0	0	0	0	0
All	START-sl2	0	0	1	0	0	0	0	0
News	NP2-sl2	1	0	0	0	0	0	0	0
ADVP2	VP3-sl3	1	0	0	0	0	0	0	0
been	VP2-sl2	0	0	0	0	0	0	0	0
has	S2-sl2	0	0	0	0	0	0	0	0
were	S2-sl2	0	0	0	0	0	0	0	0
Research	NP2-sl2	1	0	0	0	0	0	0	0
dessert	NP3-sl3	1	0	0	0	0	0	0	0
be	VP2-sl2	0	0	0	0	0	0	0	0
work	NP3-sl2	1	0	0	0	0	0	0	0
billion	QP2-sl2	1	0	0	0	0	0	0	0
Cray	PP2-sl2	0	0	0	0	0	0	0	0
Cray	START-sl2	0	0	0	0	0	0	0	0
cost	VP2-sl2	0	0	0	0	0	0	0	0
and	NP3-sl2	1	0	0	0	0	0	0	0
shares	NP3-sl3	1	0	0	0	0	0	0	0
that	VP2-sl2	0	0	1	0	0	0	0	0
Mr.	S3-sl2	0	0	0	0	0	0	0	0
called	S3-sl3	0	0	0	0	0	0	0	0
got	S2-sl2	0	0	0	0	0	0	0	0
this	FRAG2-sl2	0	0	0	0	0	0	0	0
concept	NP3-sl2	1	0	0	0	0	0	0	0
trade	VP2-sl2	0	0	0	0	0	0	0	0
vice	VP2-sl2	0	0	0	0	0	0	0	0
At	START-sl2	0	0	0	0	0	1	0	0
set	VP2-sl2	1	0	0	0	0	0	0	0
Eastern	PP2-sl2	0	0	0	0	0	0	0	0
today	NP2-sl2	1	0	0	0	0	0	0	0
from	VP2-sl2	0	0	0	0	0	1	0	0
It	START-sl2	0	0	1	0	0	0	0	0
was	S3-sl3	0	0	0	0	0	0	0	0
full	NP4-sl2	1	0	0	0	0	0	0	0
Imports	START-sl2	0	0	1	0	0	0	0	0
four	NP4-sl3	1	0	0	0	0	0	0	0
attention	VP2-sl2	1	0	0	0	0	0	0	0
less	VP2-sl2	0	0	0	0	0	0	0	0
is	S2-sl2	0	0	0	0	0	0	0	0

is	S3-sl3	0	0	0	0	0	0	0	0
added	S3-sl3	1	0	0	0	0	0	0	0
worst	NP3-sl2	1	0	0	0	0	0	0	0
at	VP3-sl2	0	0	0	0	0	1	0	0
Now	START-sl2	0	0	0	0	0	0	1	0
the	PP2-sl2	0	0	0	0	0	0	0	1
the	S3-sl2	0	0	0	0	0	0	0	0
came	S2-sl2	0	0	0	0	0	0	0	0
in	NP2-sl2	0	0	0	0	0	1	0	0
in	VP4-sl3	0	0	0	0	0	1	0	0
spokewoman	NP3-sl3	1	0	0	0	0	0	0	0
Not	START-sl2	0	1	0	0	0	0	0	0
S3	START-sl2	0.857	0	0	0	0	0	0.143	0
take	VP2-sl2	1	0	0	0	0	0	0	0
an	VP2-sl2	0	0	0	0	0	0	0	1
applied	VP2-sl2	0	0	0	0	0	0	0	0
ad	NP4-sl3	1	0	0	0	0	0	0	0
VP4	S2-sl2	1	0	0	0	0	0	0	0
our	PP2-sl2	0	0	0	0	0	0	0	0
VP3	S2-sl2	1	0	0	0	0	0	0	0
VP2	S2-sl2	1	0	0	0	0	0	0	0
VP2	S3-sl3	1	0	0	0	0	0	0	0
VP2	ADJP2-sl2	1	0	0	0	0	0	0	0
VP2	VP3-sl3	1	0	0	0	0	0	0	0
VP2	VP2-sl2	1	0	0	0	0	0	0	0

Table 2: Left corner probabilities computed directly from la treebank