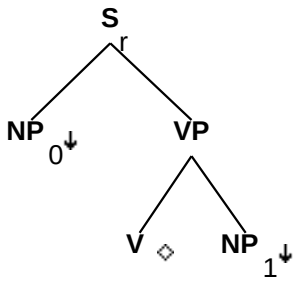
Family "Tnx0Vnx1"

March 5, 2008

1 Tree "alphanx0Vnx1"

1.1 graphe



1.2 comments

```
'John loves Mary'
 'John has loved Mary'
 'Does John love Mary'
 'Has John loved Mary'
 '(I think) (that) John loves Mary'
```

1.3 features

```
S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<extracted> = -
S_r.b:<control> = NP_0.t:<control>
S_r.b:<wh> = NP_0.t:<wh>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
```

NP_0.t:<wh> = -

NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>

VP.b:<compar> = -

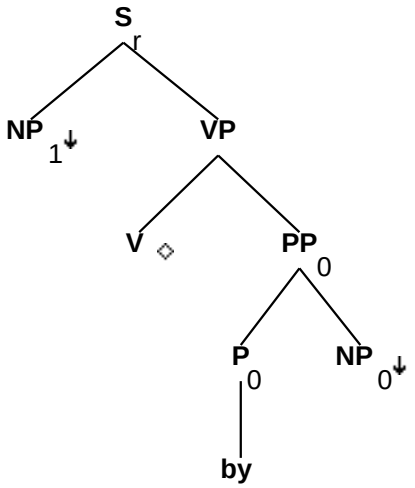
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>

V.t:<passive> = -

NP_1.t:<case> = acc

2 Tree "alphanx1Vbynx0"

2.1 graphe



2.2 comments

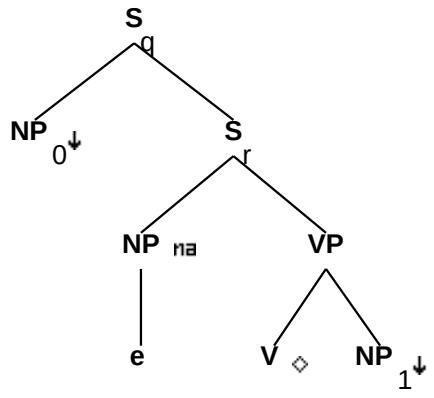
Passive:
the tree was planted by Max

2.3 features

```
S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<extracted> = -

S_r.b:<control> = NP_1.t:<control>
S_r.b:<wh> = NP_1.t:<wh>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>

S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>

NP_1.t:<wh> = -

NP_1.t:<agr> = S_r.b:<agr>
NP_1.t:<case> = S_r.b:<assign-case>


VP.b:<compar> = -

VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>

V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +

PP_0.b:<assign-case> = P_0.t:<assign-case>

PP_0.b:<assign-case> = NP_0.t:<case>
PP_0.b:<wh> = NP_0.t:<wh>

P_0.b:<assign-case> = acc
```

3 Tree "alphaW0nx0Vnx1"

3.1 graphe



3.2 comments

```
Wh on the subject
 'Who loves Mary'
 'Who has loved Mary'

check the agr equation on  NP0
```

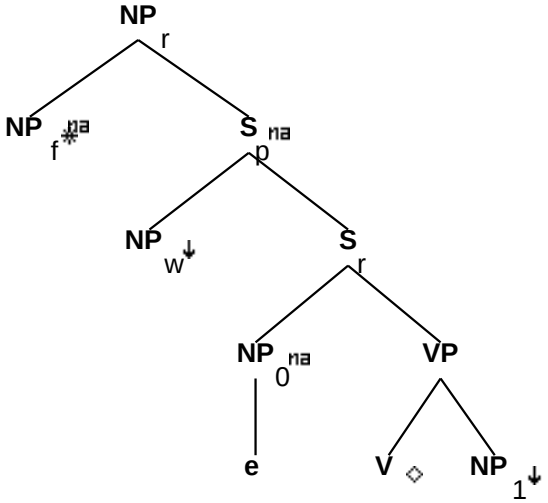
3.3 features

```
S_q.b:<extracted> = +
S_q.b:<comp> = nil

S_q.b:<wh> = NP_0.t:<wh>

S_q.b:<mode> = S_r.t:<mode>

S_q.b:<inv> = S_r.t:<inv>

NP_0.t:<wh> = +

S_r.t:<comp> = nil

S_r.t:<conj> = nil

S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<assign-comp> = inf_nil/ind_nil/ecm


S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
```

```
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>


NP.t:<trace> = NP_0.t:<trace>
NP.t:<agr> = NP_0.t:<agr>
NP.t:<case> = NP_0.t:<case>
NP.t:<wh> = NP_0.t:<wh>

NP.t:<agr> = S_r.b:<agr>
NP.t:<case> = S_r.b:<assign-case>

NP_1.t:<case> = acc


VP.b:<compar> = -

VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>

V.t:<passive> = -
```

4 Tree "betaN0nx0Vnx1"

4.1 graphe



4.2 comments

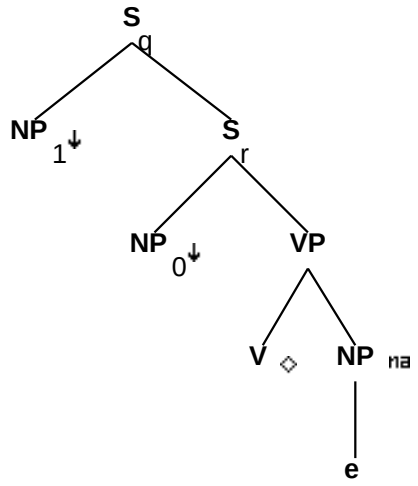
```
Wh on the subject
 'Who loves Mary'
 'Who has loved Mary'

check the agr equation on  NP0
```

4.3 features

```
NP_r.b:<rel-clause> = +
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_r.b:<compar> = NP_f.t:<compar>

NP_f.b:<case> = nom/acc
NP_f.b:<refl> = -
NP_w.t:<wh> = +
NP_w.t:<trace> = NP_0.t:<trace>
NP_w.t:<case> = NP_0.t:<case>
NP_w.t:<agr> = NP_0.t:<agr>
S_r.t:<conj> = nil
S_r.t:<comp> = nil

S_r.t:<mode> = inf/ind
S_r.t:<inv> = -

S_r.b:<comp> = nil
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>

S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<assign-comp> = VP.t:<assign-comp>
NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>

VP.b:<passive> = V.t:<passive>
VP.b:<compar> = -
VP.b:<agr> = V.t:<agr>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
V.t:<passive> = -
NP_1:<case> = acc
```

5 Tree "alphaW1nx0Vnx1"

5.1 graphe



5.2 comments

```
Wh question on the object:
 'who does John love'
 'who has John loved'
 'who do you think that John loves'
 '* who do you think that does John love'
```

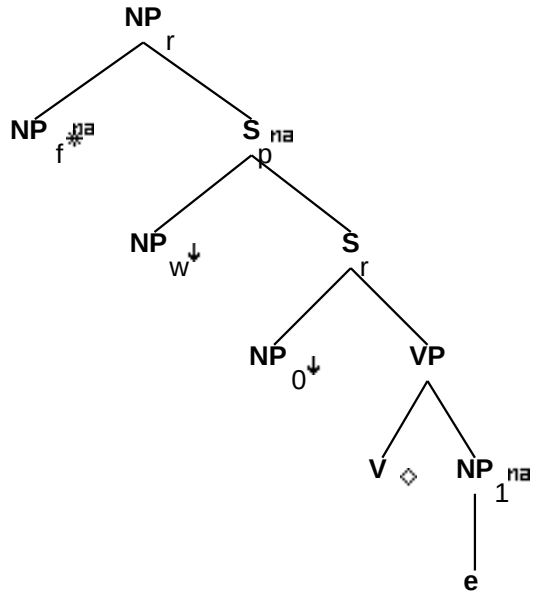
5.3 features

```
S_q.b:<extracted> = +
S_q.b:<comp> = nil

S_q.b:<inv> = S_q.b:<invlink>

S_q.b:<wh> = NP_1.t:<wh>

S_q.b:<inv> = S_r.t:<inv>
S_q.b:<mode> = S_r.t:<mode>



S_r.t:<comp> = nil
S_r.t:<conj> = nil

S_r.b:<comp> = nil
S_r.b:<inv> = -

S_r.b:<control> = NP_0.t:<control>
```

```
S_r.b:<mode> = VP.t:<mode>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<tense> = VP.t:<tense>

NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>


VP.b:<compar> = -

VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>

V.t:<passive> = -
V.t:<punct struct> = nil

NP.t:<case> = acc

NP.t:<trace> = NP_1.t:<trace>
NP.t:<agr> = NP_1.t:<agr>
NP.t:<case> = NP_1.t:<case>
NP.t:<wh> = NP_1.t:<wh>
```

6 Tree "betaN1nx0Vnx1"

6.1 graphe



6.2 comments

No original comments.

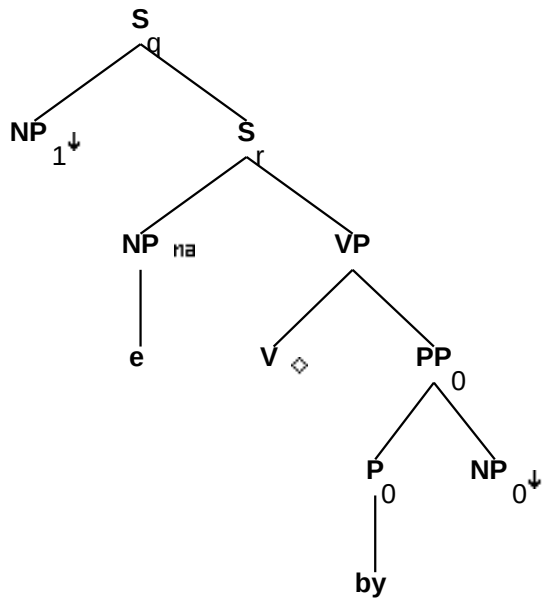
6.3 features

```
NP_r.b:<rel-clause> = +
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<case> = NP_f.t:<case>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

NP_f.b:<case> = nom/acc
NP_f.b:<refl> = -
NP_w.t:<wh> = +
NP_w.t:<trace> = NP_1.t:<trace>
NP_w.t:<case> = NP_1.t:<case>
NP_w.t:<agr> = NP_1.t:<agr>

S_r.t:<mode> = ind/inf
S_r.t:<conj> = nil
S_r.t:<comp> = nil
S_r.t:<inv> = -

S_r.b:<comp> = nil
```

```
S_r.b:<control> = NP_0.t:<control>

S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>

VP.b:<compar> = -
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mode> = V.t:<mode>
VP.b:<mainv> = V.t:<mainv>
V.t:<passive> = -
V.t:<punct struct> = nil
NP_1.t:<case> = acc
```

7 Tree "alphaW1nx1Vbynx0"

7.1 graphe



7.2 comments

Wh question on NP1 in passive constructions

'who was chosen by the artist'

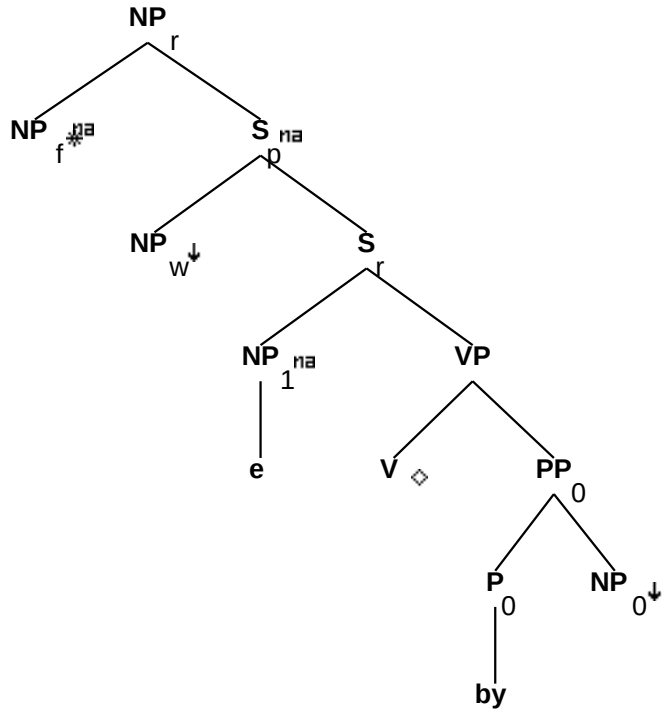
7.3 features

```
S_q.b:<extracted> = +
S_q.b:<comp> = nil

S_q.b:<wh> = NP_1.t:<wh>


S_q.b:<inv> = S_r.t:<inv>
S_q.b:<mode> = S_r.t:<mode>

NP_1.t:<wh> = +

S_r.t:<comp> = nil

S_r.t:<conj> = nil

S_r.b:<assign-comp> = inf_nil/ind_nil/ecm

S_r.b:<comp> = nil
S_r.b:<inv> = -

S_r.b:<agr> = NP.t:<agr>
S_r.b:<assign-case> = NP.t:<case>

S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>


NP.t:<agr> = NP_1.t:<agr>
NP.t:<case> = NP_1.t:<case>
NP.t:<trace> = NP_1.t:<trace>
NP.t:<wh> = NP_1.t:<wh>


VP.b:<passive> = +
VP.b:<compar> = -

VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
```

```
VP.b:<passive> = V.t:<passive>

V.t:<mode> = ppart
V.t:<passive> = +
V.t:<punct struct> = nil

PP_0.b:<assign-case> = P_0.t:<assign-case>

PP_0.b:<assign-case> = NP_0.t:<case>
PP_0.b:<wh> = NP_0:<wh>

P_0.b:<assign-case> = acc
```

8 Tree "betaN1nx1Vbynx0"

8.1 graphe



8.2 comments

```
That relative clause, extraction from NP1:
(I saw) the tree that was planted by Max
```

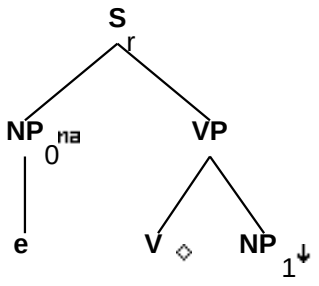
8.3 features

```
NP_r.b:<rel-clause> = +
```

```
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = nom/acc
NP_f.b:<refl> = -
NP_w.t:<wh> = +
NP_w.t:<case> = NP_1.t:<case>
NP_w.t:<agr> = NP_1.t:<agr>
NP_w.t:<trace> = NP_1.t:<trace>

S_r.t:<inv> = -
S_r.t:<mode> = ind/inf/ppart
S_r.t:<conj> = nil
S_r.t:<comp> = nil

S_r.b:<comp> = nil
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>

S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>

VP.b:<passive> = +
VP.b:<compar> = -
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
V.t:<mode> = ppart
V.t:<assign-comp> = ppart_nil
V.t:<passive> = +
V.t:<punct struct> = nil
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
PP_0.b:<wh> = NP_0.t:<wh>
P_0.b:<assign-case> = acc
```

9 Tree "alphaInx0Vnx1"

9.1 graphe



9.2 comments

```
'John loves Mary'
 'John has loved Mary'
 'Does John love Mary'
 'Has John loved Mary'
 '(I think) (that) John loves Mary'
```

9.3 features

```
S_r.b:<extracted> = -
S_r.b:<comp> = nil
S_r.b:<inv> = -

S_r.b:<wh> = NP_0.t:<wh>


S_r.b:<mode> = imp
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>

NP_0.t:<wh> = -
NP_0.t:<agr pers> = 2
NP_0.t:<agr 3rdsing> = -
NP_0.t:<agr num> = plur/sing
NP_0.t:<case> = nom

NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>
```

VP.t:<neg> = -
VP.t:<mode> = base
VP.b:<mode> = V.t:<mode>
VP.t:<tense> = pres

VP.b:<compar> = -

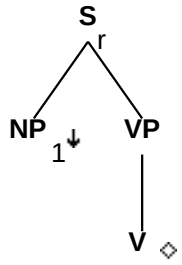
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>

V.t:<passive> = -

NP_1.t:<case> = acc

10 Tree "alphanx1V"

10.1 graphe



10.2 comments

Passive w/out by-phrase:
the tree was planted

10.3 features

S_r.b:<extracted> = -
S_r.b:<inv> = -
S_r.b:<comp> = nil

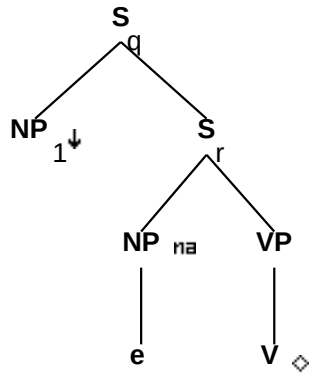
S_r.b:<control> = NP_1.t:<control>
S_r.b:<wh> = NP_1.t:<wh>

S_r.b:<mode> = VP.t:<mode>

```
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>

NP_1.t:<agr> = S_r.b:<agr>
NP_1.t:<case> = S_r.b:<assign-case>
NP_1.t:<wh> = -


VP.b:<compar> = -

VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>

V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +
```

11 Tree "alphaW1nx1V"

11.1 graphe



11.2 comments

Wh question on NP1 in passive constructions, w/o by-phrase:
what was planted

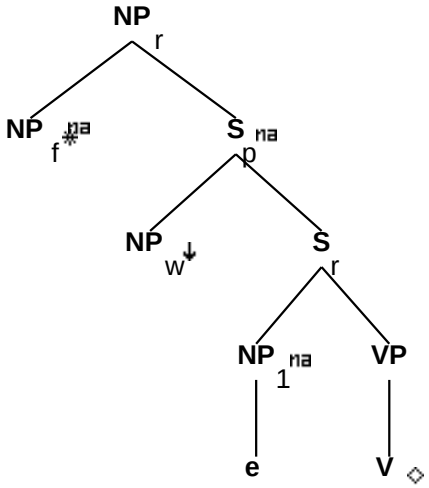
11.3 features

```
S_q.b:<extracted> = +
S_q.b:<comp> = nil

S_q.b:<wh> = NP_1.t:<wh>


S_q.b:<inv> = S_r.t:<inv>
S_q.b:<mode> = S_r.t:<mode>

NP_1.t:<wh> = +


S_r.t:<comp> = nil

S_r.t:<conj> = nil

S_r.b:<assign-comp> = inf_nil/ind_nil/ecm

S_r.b:<comp> = nil
S_r.b:<inv> = -


S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>

NP.t:<agr> = S_r.b:<agr>
NP.t:<case> = S_r.b:<assign-case>

NP.t:<trace> = NP_1.t:<trace>
NP.t:<agr> = NP_1.t:<agr>
NP.t:<case> = NP_1.t:<case>
NP.t:<wh> = NP_1.t:<wh>


VP.b:<passive> = +
VP.b:<compar> = -

VP.b:<passive> = V.t:<passive>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
```

V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +

12 Tree "betaN1nx1V"

12.1 graphe



12.2 comments

That relative clause, extraction from NP1, w/o by-phrase:
(I saw) the tree that was planted

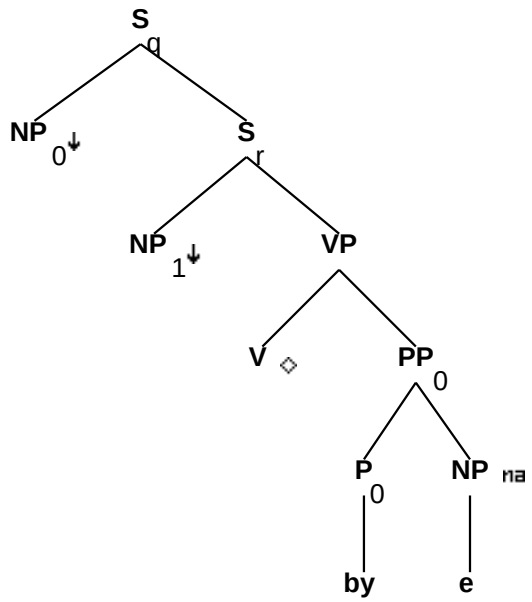
12.3 features

NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<mode> = ind/inf
S_r.t:<inv> = -
S_r.b:<comp> = nil
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>

VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<assign-comp> = ppart_nil
V.t:<passive> = +
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
V.t:<punct struct> = nil
NP_f.b:<refl> = -
S_r.t:<conj> = nil
NP_w.t:<trace> = NP_1.b:<trace>
NP_w.t:<case> = NP_1.b:<case>
NP_w.t:<agr> = NP_1.b:<agr>
NP_w.t:<wh> = +
S_r.t:<comp> = nil
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

13 Tree "alphaW0nx1Vbynx0"

13.1 graphe



13.2 comments

Wh question, extraction from by-phrase of nx0 in passive constructions:

who was the tree planted by
Topicalization:
John the tree was planted by

13.3 features

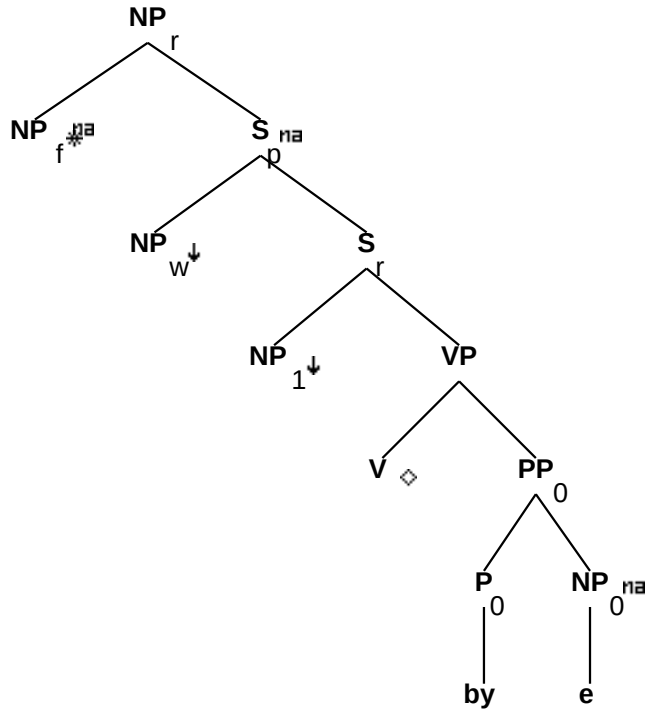
```
S_r.t:<comp> = nil
S_q.b:<extracted> = +
```

```
S_q.b:<wh> = NP_0:<wh>
S_q.b:<inv> = S_r.t:<inv>
S_q.b:<invlink> = S_q.b:<inv>
S_q.b:<mode> = S_r.t:<mode>
S_q.b:<comp> = nil
S_r.b:<inv> = -
S_r.b:<mode> = VP.t:<mode>
S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<control> = NP_1.t:<control>
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
VP.b:<passive> = V.t:<passive>
V.t:<punct struct> = nil
NP.t:<agr> = NP_0.t:<agr>
NP.t:<case> = NP_0.t:<case>
NP.t:<trace> = NP_0.t:<trace>
NP.t:<wh> = NP_0.t:<wh>
P_0.b:<assign-case> = acc
PP_0.b:<assign-case> = P_0.t:<assign-case>
NP:<case> = PP_0.b:<assign-case>
S_r.t:<conj> = nil
PP_0.b:<wh> = NP:<wh>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
```

S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>

14 Tree "betaN0nx1Vbynx0"

14.1 graphe



14.2 comments

That relative clause, extraction of NP0 from by-phrase:
(I saw) the man that the tree was planted by

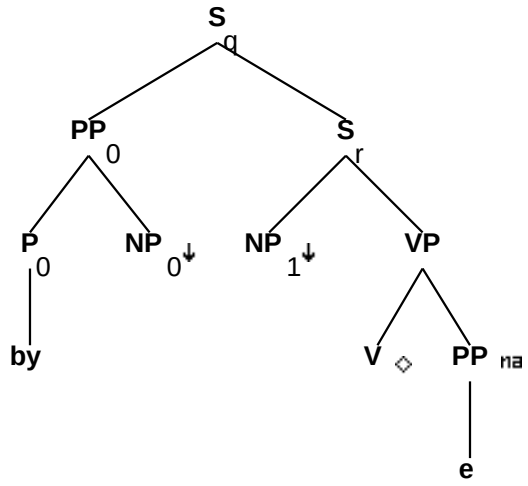
14.3 features

NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<mode> = ind/inf
S_r.t:<inv> = -
S_r.b:<comp> = nil
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>

```
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<control> = NP_1.t:<control>
VP.t:<mode> = ind
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
NP_f.b:<refl> = -
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
P_0.b:<assign-case> = acc
S_r.t:<conj> = nil

NP_w.t:<trace> = NP_0.b:<trace>
NP_w.t:<case> = NP_0.b:<case>
NP_w.t:<agr> = NP_0.b:<agr>
NP_w.t:<wh> = +
S_r.t:<comp> = nil
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
PP_0.b:<wh> = NP_0:<wh>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

15 Tree "alphapW0nx1Vbynx0"

15.1 graphe



15.2 comments

```
Wh question on NP0 in passive constructions, by-phrase extracted:
by whom was the tree planted
Topicalization:
by John the tree was planted
```

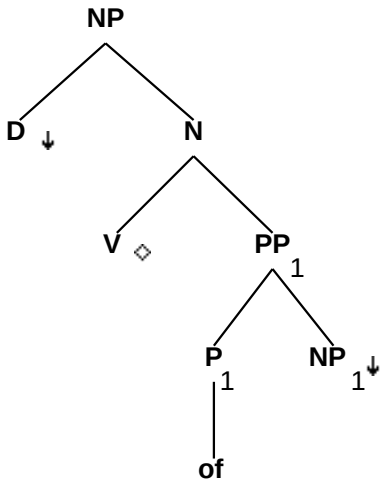
15.3 features

```
P_0.b:<assign-case> = acc
PP_0.b:<assign-case> = P_0.t:<assign-case>



S_q.b:<extracted> = +
S_q.b:<inv> = S_r.t:<inv>
S_q.b:<inv> = S_q.b:<invlink>

NP_0:<case> = PP_0.b:<assign-case>
PP_0.b:<wh> = NP_0:<wh>
S_q.b:<wh> = PP_0.t:<wh>
S_q.b:<mode> = S_r.t:<mode>
S_q.b:<comp> = nil
S_r.b:<inv> = -
S_r.b:<mode> = VP.t:<mode>
S_r.t:<comp> = nil
S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
```

S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<control> = NP_1.t:<control>
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
V.t:<punct struct> = nil
VP.b:<passive> = V.t:<passive>
PP_0.t:<trace> = PP.t:<trace>
S_r.t:<conj> = nil
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>

16 Tree ”alphaDnx0Vnx1”

16.1 graphe



16.2 comments

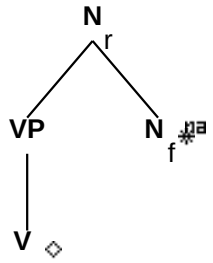
Transitive Determiner gerund tree:
’’The selling of bonds’ is beneficial’

16.3 features

NP.b:<const> = D.t:<const>
NP.b:<definite> = D.t:<definite>
NP.b:<quan> = D.t:<quan>
NP.b:<card> = D.t:<card>
NP.b:<gen> = D.t:<gen>
NP.b:<decreas> = D.t:<decreas>
NP.b:<wh> = D.t:<wh>
V.b:<mode> = ger
NP.b:<case> = nom/acc
NP.b:<agr num> = sing
NP.b:<agr pers> = 3
NP.b:<agr 3rdsing> = +
P_1.b:<assign-case> = acc
PP_1.b:<assign-case> = P_1.t:<assign-case>
PP_1.b:<assign-case> = NP_1.t:<case>
PP_1.b:<wh> = NP_1:<wh>

17 Tree "betaVtransn"

17.1 graphe



17.2 comments

-ed adjectives are prevalent in the language, but are restricted to transitive verbs. This tree handles sentences like 'the formatted disk'

17.3 features

N_f:<case> = nom/acc
N_r.b:<case> = N_f:<case>
N_r.b:<agr> = N_f:<agr>
N_r.b:<wh> = N_f:<wh>
N_r.b:<pron> = N_f:<pron>
N_r.b:<conj> = N_f:<conj>

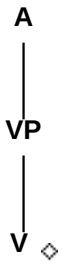
V.t:<mode> = ppart
V.t:<punct struct> = nil
VP.t:<mode> = VP.b:<mode>

VP.b:<mode> = VP.t:<mode>

VP.b:<compar> = -
N_r.b:<const> = N_f.t:<const>
N_r.b:<gen> = N_f.t:<gen>
N_r.b:<definite> = N_f.t:<definite>
N_r.b:<quan> = N_f.t:<quan>
N_r.b:<card> = N_f.t:<card>
N_r.b:<decreas> = N_f.t:<decreas>

18 Tree "alphaAV"

18.1 graphe



18.2 comments

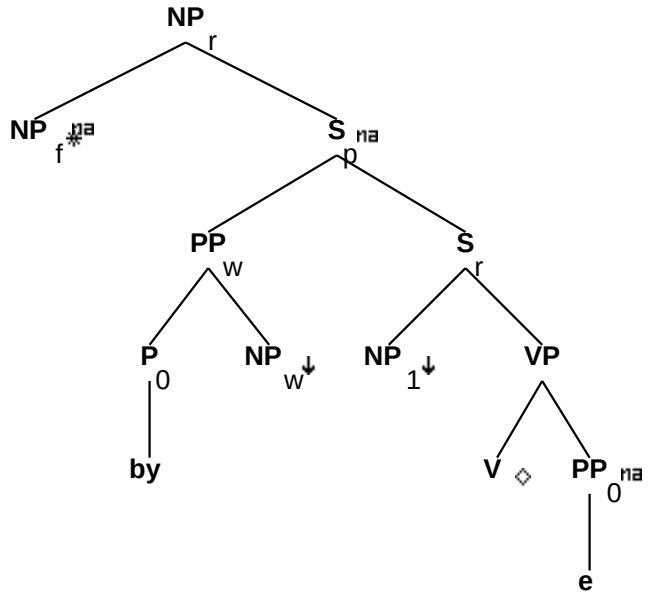
-ed adjectives are restricted to transitive verbs, so this tree is inthe transitive family. This particular tree is necessary to get these in trees like Tnx0Va1. These 'adjectives' take adjective modifiers, ie intensifiers.
Ex: John looks very/totally defeated.

18.3 features

A.b:<wh> = -
V.t:<mode> = ppart
V.t:<punct struct> = nil

19 Tree "betaNbynx0nx1Vbynx0"

19.1 graphe



19.2 comments

```
That relative clause, extraction of NP0 from by-phrase:
(I saw) the man that the tree was planted by
```

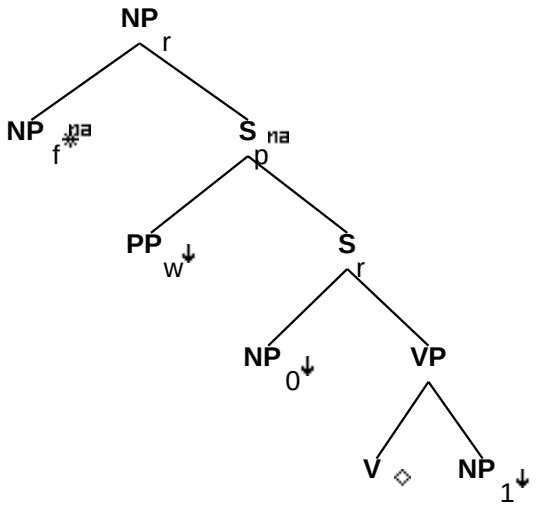
19.3 features

```
NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<mode> = ind/inf
S_r.b:<comp> = nil
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<control> = NP_1.t:<control>
VP.t:<mode> = ind
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
```

```
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
V.t:<punct struct> = nil
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
NP_f.b:<refl> = -
P_0.b:<assign-case> = acc
S_r.t:<conj> = nil

NP_w.t:<wh> = +
S_r.t:<comp> = nil
PP_w.t:<trace> = PP_0.b:<trace>
PP_w.t:<case> = PP_0.b:<case>
PP_w.t:<agr> = PP_0.b:<agr>
PP_w.b:<assign-case> = P_0.t:<assign-case>
PP_w.b:<assign-case> = NP_w.t:<case>
PP_w.b:<wh> = NP_w.t:<wh>
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

20 Tree "betaNpxnx0Vnx1"

20.1 graphe



20.2 comments

```
'John loves Mary'
 'John has loved Mary'
```

```
 'Does John love Mary'
 'Has John loved Mary'
 '(I think) (that) John loves Mary'
```

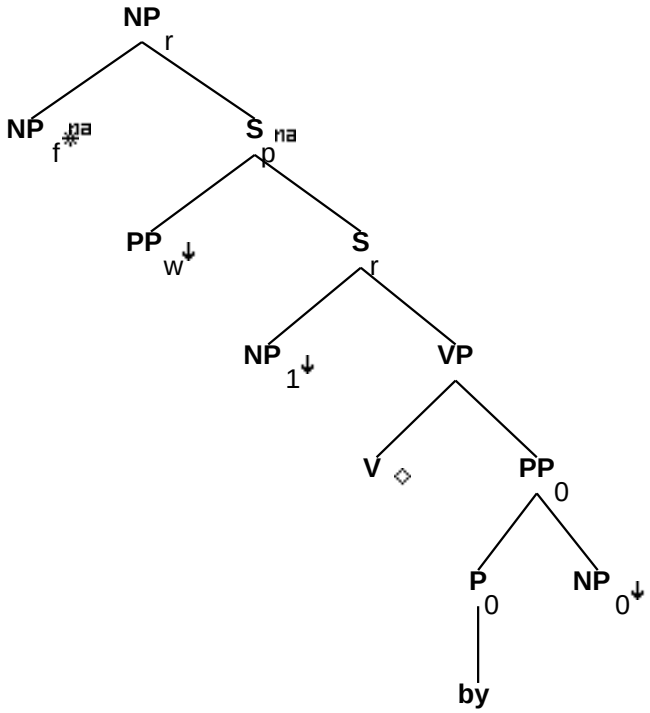
20.3 features

```
S_r.b:<extracted> = -
```

```
S_r.b:<mode> = VP.t:<mode>
S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
NP_0:<agr> = S_r.b:<agr>
NP_0:<case> = S_r.b:<assign-case>
NP_1:<case> = acc
NP_0:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
S_r.b:<inv> = -
S_r.b:<control> = NP_0.t:<control>
S_r.t:<inv> = -
PP_w.t:<wh> = +
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<comp> = nil
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

21 Tree "betaNpxnx1Vbynx0"

21.1 graphe



21.2 comments

```
Passive:
the tree was planted by Max
```

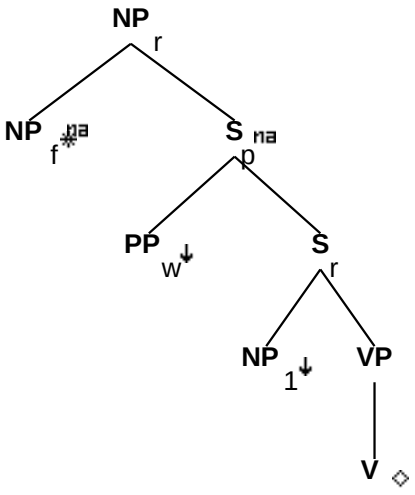
21.3 features

```
S_r.b:<mode> = VP.t:<mode>
S_r.b:<comp> = nil
S_r.b:<extracted> = -
S_r.b:<tense> = VP.t:<tense>
NP_1:<agr> = S_r.b:<agr>
NP_1:<case> = S_r.b:<assign-case>
NP_1:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
```

```
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +
S_r.b:<inv> = -
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
P_0.b:<assign-case> = acc
S_r.b:<control> = NP_1.t:<control>
S_r.t:<inv> = -
PP_w.t:<wh> = +
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<comp> = nil
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
PP_0.b:<wh> = NP_0:<wh>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

22 Tree "betaNpxnx1V"

22.1 graphe



22.2 comments

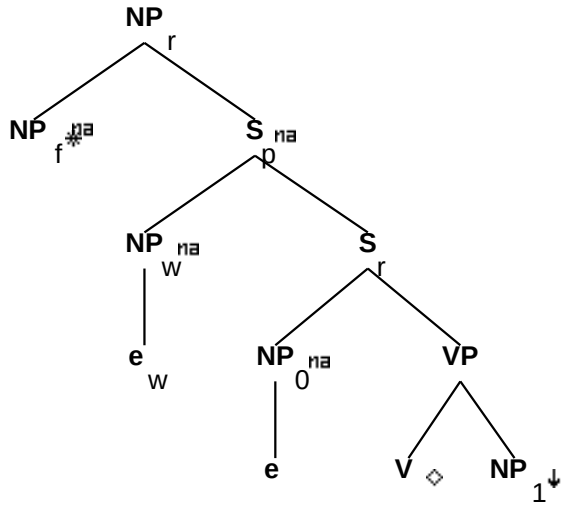
```
Passive w/out by-phrase:
the tree was planted
```

22.3 features

```
S_r.b:<extracted> = -
S_r.b:<mode> = VP.t:<mode>



S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
NP_1:<agr> = S_r.b:<agr>
NP_1:<case> = S_r.b:<assign-case>
NP_1:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +
S_r.b:<inv> = -
S_r.b:<control> = NP_1.t:<control>
S_r.t:<inv> = -
PP_w.t:<wh> = +
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<comp> = nil
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

23 Tree "betaNc0nx0Vnx1"

23.1 graphe



23.2 comments

```
Wh on the subject
 'Who loves Mary'
 'Who has loved Mary'

check the agr equation on  NP0
```

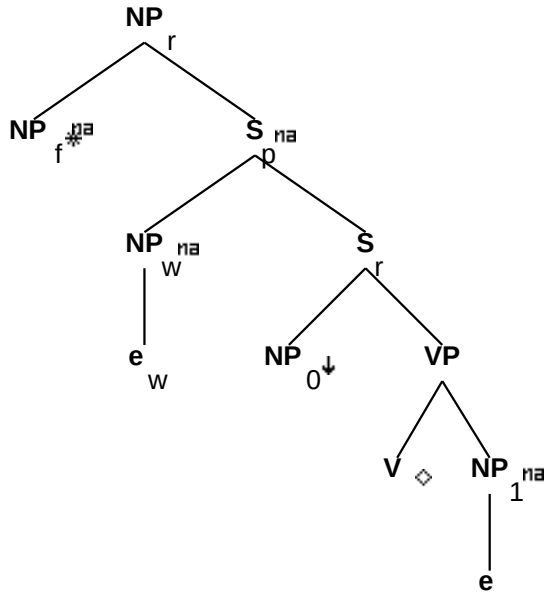
23.3 features

```
S_r.b:<comp> = nil
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.t:<inv> = -
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_0.t:<agr> = S_r.b:<agr>
NP_0.t:<case> = S_r.b:<assign-case>
NP_1:<case> = acc
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -
VP.b:<agr> = V.t:<agr>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<mode> = V.t:<mode>
```

```
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
S_r.t:<conj> = nil

NP_w.t:<trace> = NP_0.b:<trace>
NP_w.t:<case> = NP_0.b:<case>
NP_w.t:<agr> = NP_0.b:<agr>
NP_r.b:<rel-clause> = +
S_r.t:<mode> = inf/ger/ind
S_r.t:<nocomp-mode> = inf/ger
VP.t:<assign-comp> = that/ind_nil/inf_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_f.b:<refl> = -
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

24 Tree "betaNc1nx0Vnx1"

24.1 graphe



24.2 comments

No original comments.

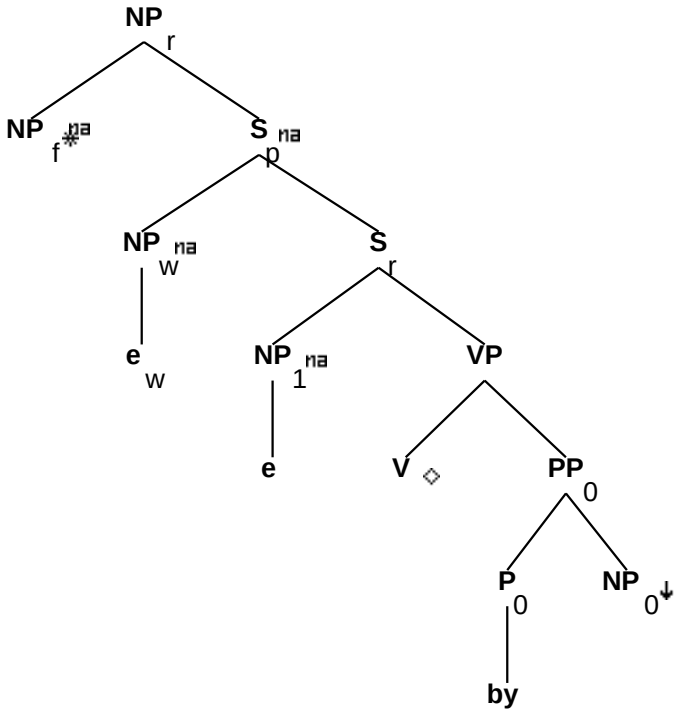
24.3 features

```
S_r.b:<mode> = VP.t:<mode>
```

```
S_r.b:<tense> = VP.t:<tense>
S_r.b:<comp> = nil
S_r.t:<inv> = -
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<case> = NP_f.t:<case>
NP_r.b:<agr> = NP_f.t:<agr>
NP_1.t:<case> = acc
NP_0:<agr> = S_r.b:<agr>
NP_0:<case> = S_r.b:<assign-case>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -
V.t:<punct struct> = nil
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mode> = V.t:<mode>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
NP_f.b:<refl> = -
S_r.t:<conj> = nil

S_r.b:<control> = NP_0.t:<control>
NP_w.t:<trace> = NP_1.b:<trace>
NP_w.t:<case> = NP_1.b:<case>
NP_w.t:<agr> = NP_1.b:<agr>
NP_r.b:<rel-clause> = +
S_r.t:<mode> = inf/ind
S_r.t:<nocomp-mode> = ind
VP.t:<assign-comp> = that/for/ind_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_f.b:<case> = nom/acc
NP_f.b:<refl> = -
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

25 Tree "betaNc1nx1Vbynx0"

25.1 graphe



25.2 comments

```
That relative clause, extraction from NP1:
(I saw) the tree that was planted by Max
```

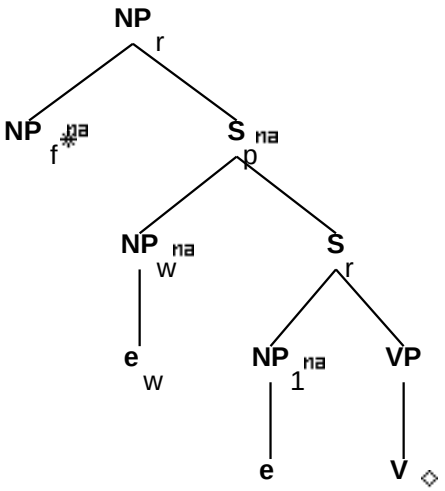
25.3 features

```
NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<inv> = -
S_r.b:<comp> = nil
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
```

```
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
V.t:<mode> = ppart
V.t:<assign-comp> = ppart_nil
V.t:<passive> = +
V.t:<punct struct> = nil
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<compar> = -
NP_f.b:<refl> = -
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
P_0.b:<assign-case> = acc
S_r.t:<conj> = nil

NP_w.t:<trace> = NP_1.b:<trace>
NP_w.t:<case> = NP_1.b:<case>
NP_w.t:<agr> = NP_1.b:<agr>
NP_r.b:<rel-clause> = +
S_r.t:<mode> = inf/ger/ind/ppart
S_r.t:<nocomp-mode> = ind/ger/ppart
VP.t:<assign-comp> = that/inf_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_f.b:<case> = nom/acc
PP_0.b:<wh> = NP_0:<wh>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

26 Tree "betaNc1nx1V"

26.1 graphe



26.2 comments

That relative clause, extraction from NP1, w/o by-phrase:
(I saw) the tree that was planted

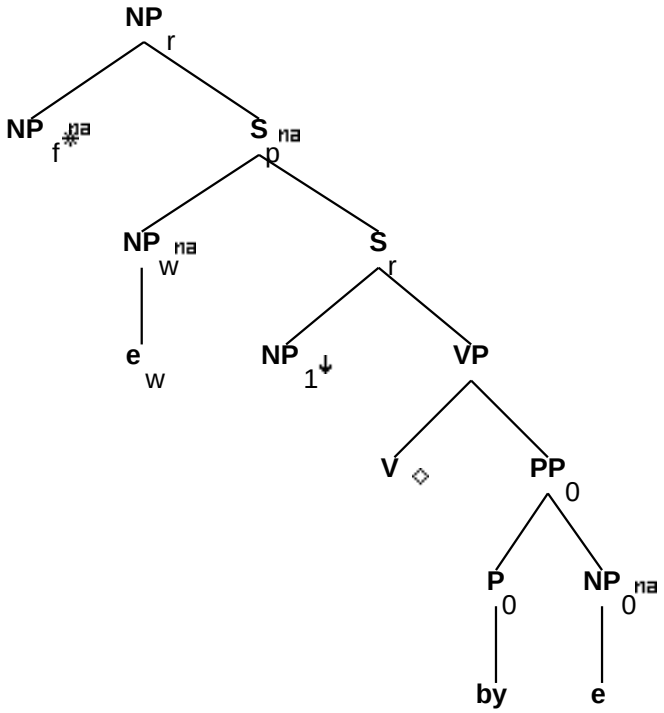
26.3 features

NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<inv> = -
S_r.b:<comp> = nil
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<passive> = +
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<assign-comp> = ppart_nil
V.t:<passive> = +
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
V.t:<punct struct> = nil
NP_f.b:<refl> = -
S_r.t:<conj> = nil

NP_w.t:<trace> = NP_1.b:<trace>
NP_w.t:<case> = NP_1.b:<case>
NP_w.t:<agr> = NP_1.b:<agr>
NP_r.b:<rel-clause> = +
S_r.t:<mode> = inf/ppart/ger/ind
S_r.t:<mode> = ind/inf/ger/ppart
S_r.t:<nocomp-mode> = ind/ger/ppart
VP.t:<assign-comp> = that/inf_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

27 Tree "betaNc0nx1Vbynx0"

27.1 graphe



27.2 comments

```
That relative clause, extraction of NP0 from by-phrase:
(I saw) the man that the tree was planted by
```

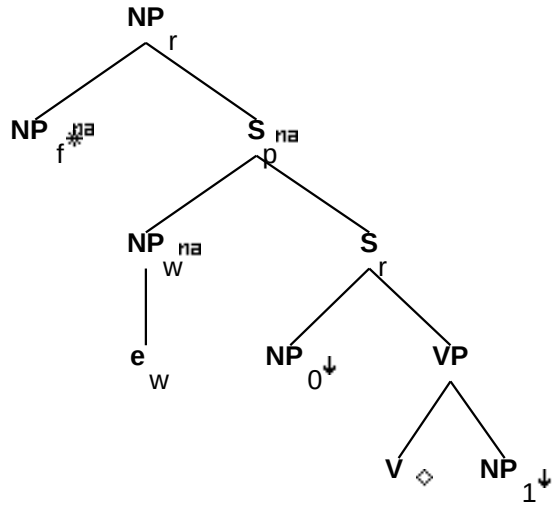
27.3 features

```
NP_f.t:<agr> = NP_r.b:<agr>
NP_f.t:<wh> = NP_r.b:<wh>
NP_f.t:<case> = NP_r.b:<case>
S_r.t:<inv> = -
S_r.b:<comp> = nil
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<agr> = NP_1.t:<agr>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<control> = NP_1.t:<control>
VP.t:<mode> = ind
VP.b:<passive> = +
```

```
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
NP_f.b:<refl> = -
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
P_0.b:<assign-case> = acc
S_r.t:<conj> = nil

NP_w.t:<trace> = NP_0.b:<trace>
NP_w.t:<case> = NP_0.b:<case>
NP_w.t:<agr> = NP_0.b:<agr>
NP_r.b:<rel-clause> = +
S_r.t:<mode> = inf/ind
S_r.t:<mode> = ind/inf
S_r.t:<nocomp-mode> = ind
VP.t:<assign-comp> = that/for/ind_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_f.b:<case> = nom/acc
NP_f.b:<refl> = -
PP_0.b:<wh> = NP_0:<wh>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>
```

28 Tree "betaNcnx0Vnx1"

28.1 graphe



28.2 comments

```
'John loves Mary'
 'John has loved Mary'
 'Does John love Mary'
 'Has John loved Mary'
 '(I think) (that) John loves Mary'
```

28.3 features

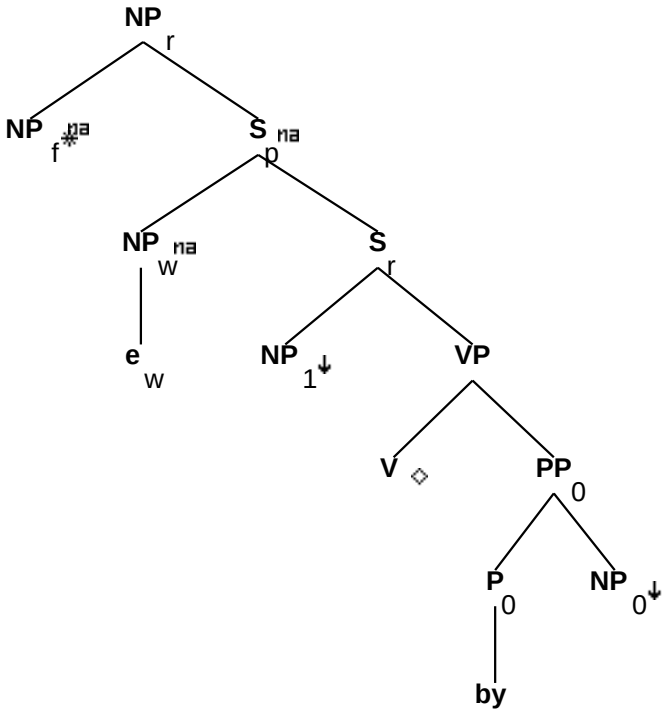
```
S_r.b:<extracted> = -
```

```
S_r.b:<mode> = VP.t:<mode>
S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
NP_0:<agr> = S_r.b:<agr>
NP_0:<case> = S_r.b:<assign-case>
NP_1:<case> = acc
NP_0:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -
VP.b:<agr> = V.t:<agr>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
```

```
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
S_r.b:<inv> = -
S_r.b:<control> = NP_0.t:<control>
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<inv> = -
S_r.t:<mode> = ind/inf
S_r.t:<nocomp-mode> = ind
VP.t:<assign-comp> = that/for/ind_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

29 Tree "betaNcnx1Vbynx0"

29.1 graphe



29.2 comments

```
Passive:
the tree was planted by Max
```

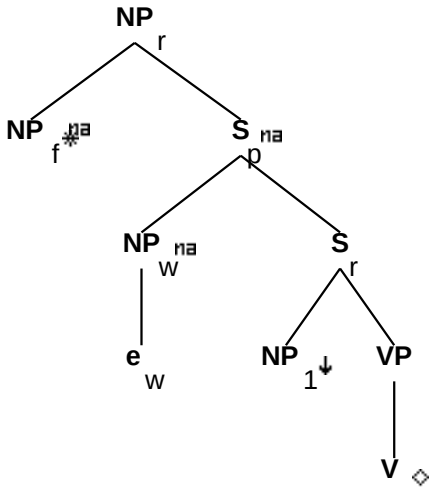
29.3 features

```
S_r.b:<mode> = VP.t:<mode>
S_r.b:<comp> = nil
S_r.b:<extracted> = -
S_r.b:<tense> = VP.t:<tense>
NP_1:<agr> = S_r.b:<agr>
NP_1:<case> = S_r.b:<assign-case>
NP_1:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
```

```
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
V.t:<punct struct> = nil
S_r.b:<inv> = -
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
P_0.b:<assign-case> = acc
S_r.b:<control> = NP_1.t:<control>
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<inv> = -
S_r.t:<mode> = ind/inf
S_r.t:<nocomp-mode> = ind
VP.t:<assign-comp> = that/for/ind_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
PP_0.b:<wh> = NP_0:<wh>
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

30 Tree "betaNcnx1V"

30.1 graphe



30.2 comments

```
Passive w/out by-phrase:
the tree was planted
```

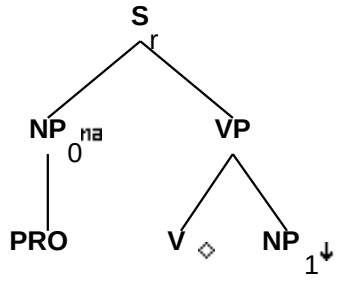
30.3 features

```
S_r.b:<extracted> = -
S_r.b:<mode> = VP.t:<mode>



S_r.b:<comp> = nil
S_r.b:<tense> = VP.t:<tense>
NP_1:<agr> = S_r.b:<agr>
NP_1:<case> = S_r.b:<assign-case>
NP_1:<wh> = -
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-case> = VP.t:<assign-case>
S_r.b:<assign-comp> = VP.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<assign-case> = V.t:<assign-case>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
VP.b:<compar> = -
V.t:<punct struct> = nil
```

```
V.t:<mode> = ppart
V.t:<passive> = +
S_r.b:<inv> = -
S_r.b:<control> = NP_1.t:<control>
NP_r.b:<wh> = NP_f.t:<wh>
NP_r.b:<agr> = NP_f.t:<agr>
NP_r.b:<case> = NP_f.t:<case>
NP_f.b:<case> = acc/nom
S_r.t:<inv> = -
S_r.t:<mode> = ind/inf
S_r.t:<nocomp-mode> = ind
VP.t:<assign-comp> = that/for/ind_nil
S_r.b:<nocomp-mode> = S_r.b:<mode>
NP_r.b:<rel-clause> = +
NP_f.b:<case> = nom/acc
NP_r.b:<pron> = NP_f.t:<pron>
NP_r.b:<compar> = NP_f.t:<compar>

S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
```

31 Tree "alphanx0Vnx1-PRO"

31.1 graphe



31.2 comments

```
Transitive with PRO subject:

 John wants [PRO to love Mary]
 While [PRO eating cheese] John choked.
```

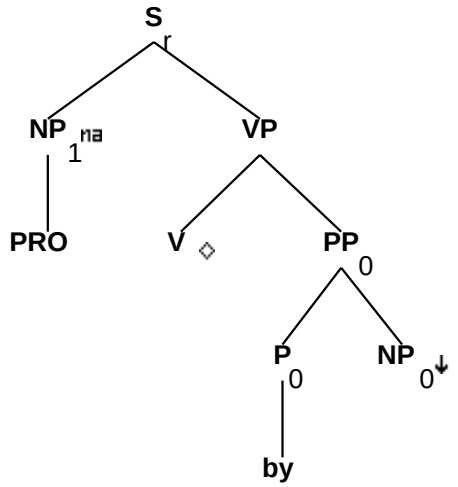
31.3 features

```
S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<extracted> = -
```

S_r.b:<control> = NP_0.t:<control>
S_r.b:<wh> = NP_0.t:<wh>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
NP_0.t:<wh> = -
NP_0.t:<case> = none
NP_0.t:<agr> = S_r.b:<agr>
S_r.b:<assign-case> = NP_0.t:<case>
VP.t:<mode> = inf/ger
VP.b:<compar> = -
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<mode> = V.t:<mode>
VP.b:<tense> = V.t:<tense>
VP.b:<mainv> = V.t:<mainv>
V.t:<passive> = -
NP_1.t:<case> = acc

32 Tree "alphanx1Vbynx0-PRO"

32.1 graphe



32.2 comments

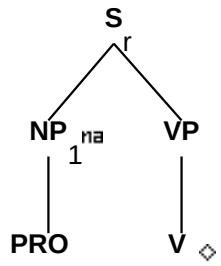
```
Passive w/ by-phrase and PRO subject:

 [PRO to be beaten by John] is pathetic
 While [PRO being scolded by his mother] John started to cry.
```

32.3 features

```
S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<extracted> = -
S_r.b:<control> = NP_1.t:<control>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<wh> = NP_1.t:<wh>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
NP_1.t:<wh> = -
NP_1.t:<case> = none
NP_1.t:<agr> = S_r.b:<agr>
VP.t:<mode> = inf/ger
VP.b:<compar> = -
VP.b:<mode> = V.t:<mode>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
V.t:<punct struct> = nil
V.t:<mode> = ppart
V.t:<passive> = +
PP_0.b:<assign-case> = P_0.t:<assign-case>
PP_0.b:<assign-case> = NP_0.t:<case>
PP_0.b:<wh> = NP_0.t:<wh>
P_0.b:<assign-case> = acc
```

33 Tree "alphanx1V-PRO"

33.1 graphe



33.2 comments

```
Passive w/ PRO subject & w/out by-phrase:

 John wants [PRO to be loved]
 While [PRO being punished] John cried.
```

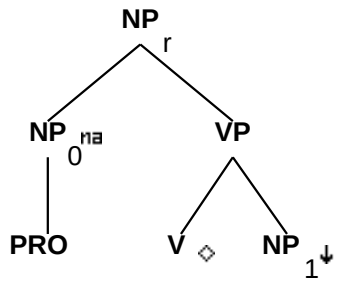
33.3 features

```
S_r.b:<extracted> = -
S_r.b:<inv> = -
S_r.b:<comp> = nil
S_r.b:<control> = NP_1.t:<control>
S_r.b:<wh> = NP_1.t:<wh>
S_r.b:<assign-case> = NP_1.t:<case>
S_r.b:<mode> = VP.t:<mode>
S_r.b:<progressive> = VP.t:<progressive>
S_r.b:<perfect> = VP.t:<perfect>
S_r.b:<passive> = VP.t:<passive>
S_r.b:<mainv> = VP.t:<mainv>
S_r.b:<tense> = VP.t:<tense>
S_r.b:<agr> = VP.t:<agr>
S_r.b:<assign-comp> = VP.t:<assign-comp>
S_r.b:<assign-case> = VP.t:<assign-case>
NP_1.t:<agr> = S_r.b:<agr>
NP_1.t:<wh> = -
NP_1.t:<case> = none
VP.b:<compar> = -
VP.b:<mode> = V.t:<mode>
VP.b:<assign-comp> = V.t:<assign-comp>
VP.b:<tense> = V.t:<tense>
VP.b:<passive> = V.t:<passive>
VP.b:<agr> = V.t:<agr>
VP.b:<mainv> = V.t:<mainv>
V.t:<punct struct> = nil
V.t:<mode> = ppart
```

V.t:<passive> = +
VP.t:<mode> = inf/ger

34 Tree "alphaGnx0Vnx1-PRO"

34.1 graphe



34.2 comments

Transitive NP gerund tree w/ PRO subject:

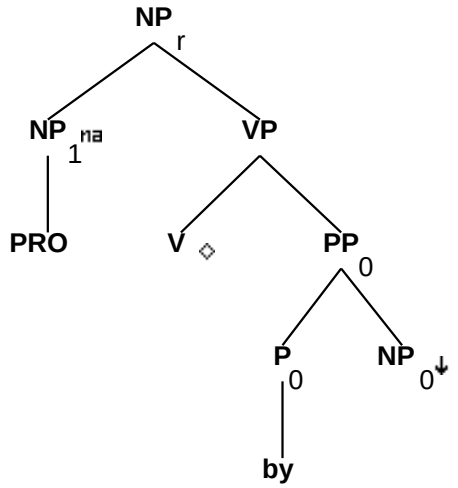
Private markets approved of [PRO bashing Wall Street]

34.3 features

NP_0:<wh> = NP_r.b:<wh>
NP_r.b:<compar> = NP_0:<compar>
NP_r.b:<case> = nom/acc
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +
NP_1:<case> = acc
NP_0.t:<wh> = -
NP_0.t:<case> = none
VP.t:<mode> = ger
VP.b:<compar> = -
NP_r.b:<gerund> = +
VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -

35 Tree "alphaGnx1Vbynx0-PRO"

35.1 graphe



35.2 comments

Transitive gerund passive with the 'by' phrase and PRO subject:

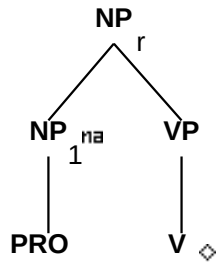
The children were upset about [PRO being punished by their parents.

35.3 features

NP_r.b:<case> = nom/acc
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +
NP_1.t:<wh> = -
NP_1.t:<case> = none
NP_1:<wh> = NP_r.b:<wh>
NP_r.b:<compar> = NP_1:<compar>
VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>
NP_r.b:<gerund> = +
PP_0.b:<assign-case> = P_0.t:<assign-case>
P_0.b:<assign-case> = acc
NP_0:<case> = PP_0.b:<assign-case>
PP_0.b:<wh> = NP_0:<wh>
VP.t:<mode> = ger
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +

36 Tree "alphaGnx1V-PRO"

36.1 graphe



36.2 comments

Transitive gerund passive without the 'by' phrase and w/ PRO subject:

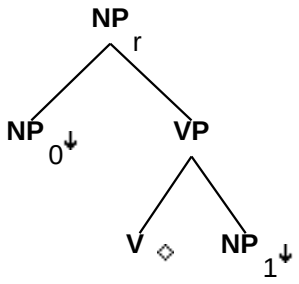
John was upset about [PRO being mugged]

36.3 features

NP_r.b:<case> = nom/acc
NP_r.b:<gerund> = +
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +
NP_r.b:<wh> = NP_1:<wh>
NP_r.b:<compar> = NP_1:<compar>
NP_1.t:<wh> = -
NP_1.t:<case> = none
VP.t:<mode> = ger
VP.b:<compar> = -
VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>
V.t:<mode> = ppart
V.t:<passive> = +

37 Tree "alphaGnx0Vnx1"

37.1 graphe



37.2 comments

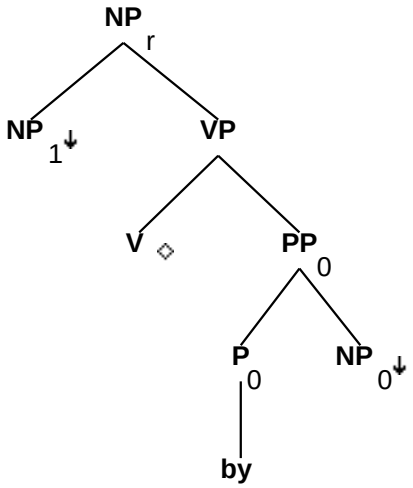
```
Transitive NP gerund tree:
'Private markets approved of 'Washington bashing Wall Street''
'Private markets approved of 'Washington's bashing Wall Street''
```

37.3 features

```
NP_0:<wh> = NP_r.b:<wh>
NP_r.b:<compar> = NP_0:<compar>
NP_r.b:<case> = nom/acc
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +
NP_1:<case> = acc


VP.t:<mode> = ger

VP.b:<compar> = -
NP_r.b:<gerund> = +
VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>
V.t:<passive> = -
NP_0:<case> = acc/gen
```

38 Tree "alphaGnx1Vbynx0"

38.1 graphe



38.2 comments

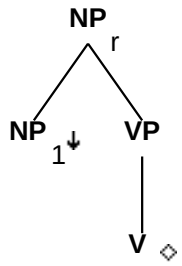
```
Transitive gerund passive with the 'by' phrase:
'Private markets approved of 'Wall Street being bashed by Washington''
```

38.3 features

```
NP_r.b:<case> = nom/acc
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +

NP_1:<wh> = NP_r.b:<wh>
NP_r.b:<compar> = NP_1:<compar>
VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>

NP_r.b:<gerund> = +

PP_0.b:<assign-case> = P_0.t:<assign-case>
P_0.b:<assign-case> = acc
NP_0:<case> = PP_0.b:<assign-case>
PP_0.b:<wh> = NP_0:<wh>
VP.t:<mode> = ger
VP.b:<compar> = -
V.t:<mode> = ppart
V.t:<passive> = +
NP_1:<case> = acc/gen
```

39 Tree "alphaGnx1V"

39.1 graphe



39.2 comments

```
Transitive gerund passive without the 'by' phrase:
'John was devastated at 'Mary being killed''
```

39.3 features

```
NP_r.b:<case> = nom/acc
NP_r.b:<agr num> = sing
NP_r.b:<agr pers> = 3
NP_r.b:<agr 3rdsing> = +

NP_r.b:<wh> = NP_1:<wh>
NP_r.b:<compar> = NP_1:<compar>

NP_r.b:<gerund> = +
VP.t:<mode> = ger
VP.b:<compar> = -

VP.b:<mode> = V.t:<mode>
VP.b:<passive> = V.t:<passive>
V.t:<mode> = ppart
V.t:<passive> = +
NP_1:<case> = acc/gen
```