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```

[det,syn,head,agr] == [n,syn,head,agr],
[np,syn,head] == [n,syn,head],
[np,sem,quant] == [det,sem],
[np,sem,restr] == [n,sem].

iv ==> vp if
  iv: (@verb,
       syn:subcat:1),
  vp: @vp,
  [vp,syn,head] == [iv,syn,head],
  [vp,sem] == [iv,sem].

tv, np ==> vp if
  tv: (@verb,
       syn:subcat:2),
  np: @obj_np,
  vp: @vp,
  [vp,syn,head] == [tv,syn,head],
  [vp,sem] == [tv,sem],
  [vp,sem,obj] == [np,sem].

bv, np1, np2 ==> vp if
  bv: (@verb,
       syn:subcat:3),
  np1: @obj_np,
  np2: @obj_np,
  vp: @vp,
  [vp,syn,head] == [bv,syn,head],
  [vp,sem] == [bv,sem],
  [vp,sem,obj] == [np2,sem],
  [vp,sem,obj2] == [np1,sem].

aux, vp1 ==> vp2 if
  aux: (@verb,
        syn:subcat:4),
  vp1: @vp,
  vp2: @vp,
  [aux,syn,aux] == [vp1,syn,head,vform],
  [vp2,syn,head] == [aux,syn,head],
  [vp2,syn,head,agr] == [vp1,syn,head,agr],
  [vp2,sem,xcomp] == [vp1,sem],
  [vp2,sem] == [aux,sem].

cv, inf ==> vp if
  cv: (@verb,
       syn:subcat:5),
  inf: (@vp,
        syn:head:vform:inf),
  vp: @vp,
  [vp,syn,head] == [cv,syn,head],
  [vp,syn,head,agr] == [inf,syn,head,agr],

```


% -----
tall____>
 @adj,
 sem:tall.

/* Intransitive Verbs
Y_____

feast____>
 @verb, @norm, @base,
 syn:subcat:1,
 sera:rel:feast.

feasted____>
 @verb, @norm, @past,
 syn:subcat:1,
 sem:rel:feast.

feasts____>
 @verb, @norm, @third_sing, @present,
 syn:subcat:1,
 sem:rel:feast.

feast____>
 @verb, @norm, @non_third_sing, @present,
 syn:subcat:1,
 sem:rel:feast,

feasting____>
 @verb, @norm, @present.participle,
 syn:subcat:1,
 sem:rel:feast.

feasted____>
 @verb, @norm, @past.participle,
 syn:subcat:1,
 sera:rel:feast.

*1% Expletive Intransitive Verbs
Y_____

rain____>
 @verb, @it, @base,
 syn:subcat:1,
 sem:rel:rain,

rained____>
 @verb, @it, @past,
 syn:subcat:1,
 sem:rel:rain,

rains____>
 @verb, @it, @present,
 syn:subcat:1,
 sem:rel:rain,

raining____>
 @verb, @it, @present_participle,
 syn:subcat:1,
 sem:rel:rain,

rained____>

syn:subcat:3,
 sem:rel:give.
 given____>
 @verb, @norm, @past_participle,
 syn:subcat:3,
 sem:rel:give.

% Subject Raising Verbs
 % -----

seem____>
 @verb, @base,
 syn:subcat:5,
 sem:rel:seem,
 seemed____>
 @verb, @past,
 syn:subcat:5,
 sem:rel:seem,
 seems____>
 @verb, @present,
 ((@third_sing, @norm)
 ; @it),
 syn:subcat:5,
 semrrel:seem,
 seem____>
 @verb, @norm, @non_third_sing, @present,
 syn:subcat:5,
 sem:rel:seem,
 seeming____>
 @verb, @present.participle,
 syn:subcat:5,
 sera:rel:seem,
 seemed____>
 @verb, @past.participle,
 syn:subcat:5,
 semrrel:seem.

% Auxiliaries

y _____
 did____>
 @verb, @past,
 syn:subcat:4,
 syn:aux:base,
 do____>
 @verb, @non_third_sing, @present,
 syn:subcat:4,
 syn:aux:base,
 does____>
 @verb, @third.sing, @present,
 syn:subcat:4,
 syn:aux:base.

have____>
 @verb, @base,
 syn:subcat:4,
 syn:aux:past_part.

had____>
 @verb, @past,
 syn:subcat:4,
 syn:aux:past_part.

have -->
 @verb, @non_third_sing, @present,
 syn:subcat:4,
 syn:aux:past.part.

has____>
 @verb, @present,
 ((@third_sing, @norm)
 ; @it),
 syn:subcat:4,
 syn:aux:past_part.

to____>
 @verb, @inf,
 synrsubcat:4,
 syn:aux:base.

be____>
 @verb, @base,
 syn:subcat:4,
 syn:aux:pres_part.

was____>
 @verb, @past, @sing, @norm,
 syn:subcat:4,
 syn:aux:pres_part.

was____>
 @verb, @past, @it,
 syn:subcat:4,
 syn:aux:pres_part.

were____>
 @verb, @past, @norm,
 (@second
 ;@plu).
 syn:subcat:4,
 syn:aux:pres_part.

am____>
 @verb, @present, @first, @sing, @norm,
 syn:subcat:4,
 syn:aux:pres_part.

is____>
 @verb, @present, @third.sing, @norm,
 syn:subcat:4,
 syn:aux:pres.part.

are____>

```

©verb, ©present, ©norm,
  (©second
   ;©plu),
  syn:subcat:4,
  syn:aux:pres_part.
being____>
  ©verb, ©present.participle,
  syn:subcat:4,
  syn:aux:pres_part.
been____>
  ©verb, ©past_participle,
  syn:subcat:4,
  syn:aux:pres_part.

```

```

% Adverbs

```

```

% -----

```

```

slowly____>
  ©adv,
  sem:slowly,
probably____>
  ©adv,
  syn:order:pre,
  sem:probably,
yesterday____>
  ©adv,
  syn:order:post,
  sem:yesterday.

```

```

% MACROS

```

```

% -----

```

```

bar0 macro syn:foot:bar:0.
bar1 macro syn:foot:bar:1.
bar2 macro syn:foot:bar:2.

```

```

pro macro sem:pro.

```

```

first macro syn:head:agr:pers:1.
second macro syn:head:agr:pers:2.
third macro syn:head:agr:pers:3.

```

```

sing macro syn:head:agr:num:* sing,
plu macro syn:head:agr:num:plu.

```

```

third_sing macro ©third, ©sing.
non_third_sing macro ©plu ; ©second ; ©first.

```

```

finite macro syn:head:vform:fin.
base macro syn:head:vform:base.

```

```

inf      macro   syn:head:vform:inf.

present macro   @finite, sem:tim:present.
past     macro   @finite, sem:tim:past.

present_participle macro
  syn:head:vform:pres_part,
  sem:aspect:progressive.
past_participle macro
  syn:head:vform:past_part,
  sem:aspect:perfect.

norm     macro   syn:head:agr:nform:norm.
it       macro   syn:head:agr:nform:it.

nominal  macro   syn:head:maj:nom:yes.
non_nominal macro syn:head:maj:nom:no.

verbal   macro   syn:head:maj:verb:yes.
non_verbal macro syn:head:maj:verb:no.

n        macro   @nominal, @non_verbal, @bar1.
np       macro   @nominal, @non_verbal, @bar2.

name     macro   @np, @third_sing, @norm.

subj_np  macro   @np, syn:head:case:subj.
obj_np   macro   @np, syn:head:case:obj.

verb     macro   @verbal, @non_nominal, @bar0.
vp       macro   @verbal, @non_nominal, @bar1.
s        macro   @verbal, @non_nominal, @bar2.

det      macro   syn:head:maj:det.
adv      macro   syn:head:maj:adv.
adj      macro   syn:head:maj:adj.

```

Acknowledgements

I would like to thank Alex Franz for comments on two earlier drafts. The fact that this piece of software exists in usable form is due to Lori Levin, who wanted a PATR-II parser for her Natural Language Processing course at Carnegie Mellon. ProP was developed on a Hewlett-Packard Bobcat 350 workstation using C-Prolog.

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