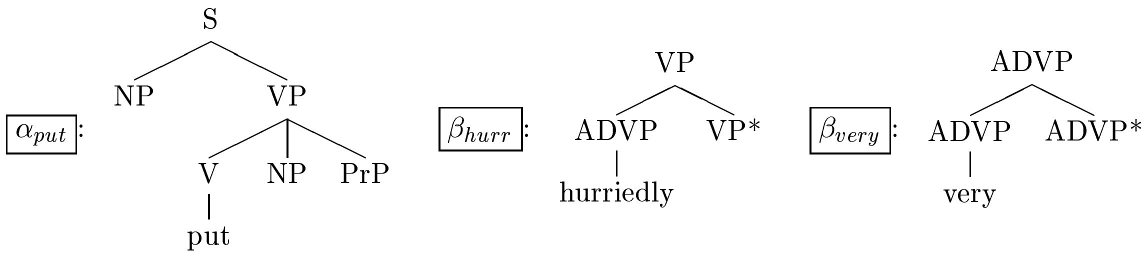
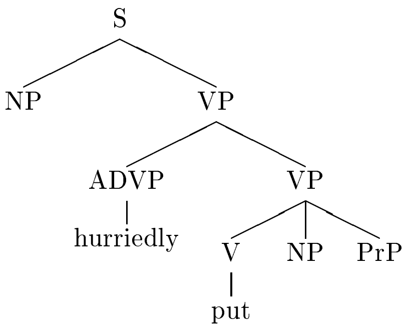
CS674, Spring 2002
Lecture Examples, 1/30/02

1. Examples from last lecture's handout.

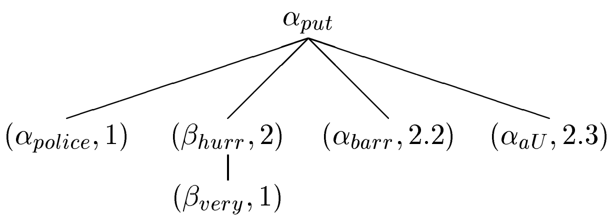
1**(a)** Some elementary trees.



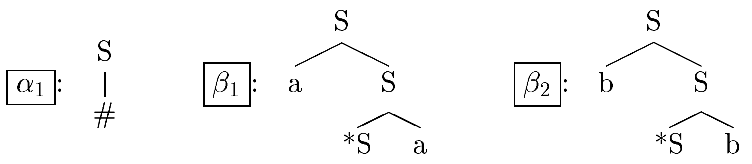
1**(b)** Adjunction of β_{hurr} into α_{put} at address 2:



1**(c)** Derivation tree for "police very hurriedly put barricades around Upson". Note slight notational switch.

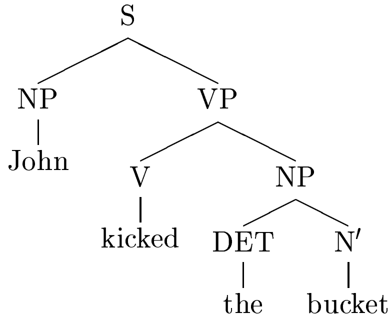


2. [Joshi, Vijay-Shankar, and Weir, 1991] A TAG generating a non-CFL (verify via intersection with $L(a^*b^*\#a^*b^*)$).



3. Idioms.

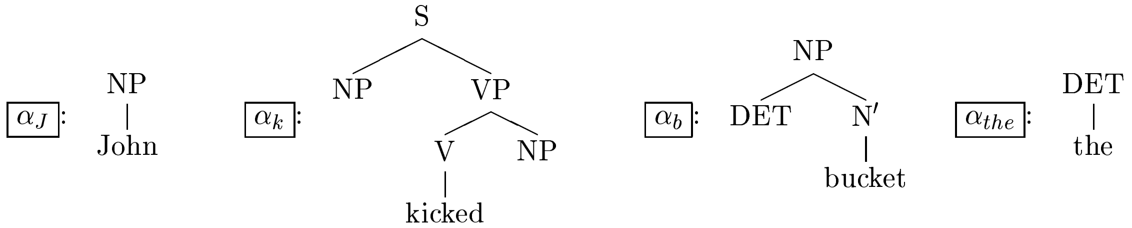
3**(a)** John kicked the bucket.



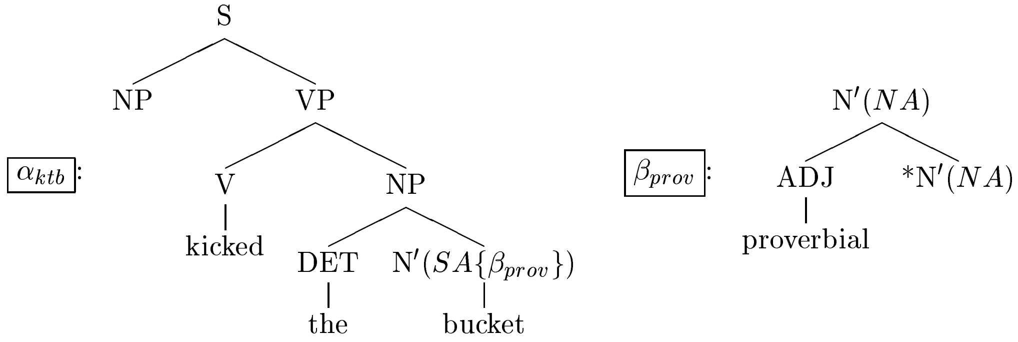
3**(b)** John kicked the proverbial bucket.

3**(c)** John kicked the red bucket.

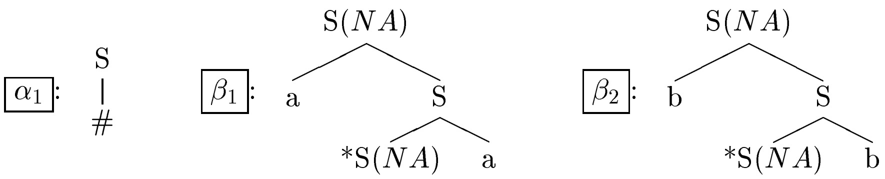
3**(d)** Elementary trees for the non-idiomatic reading.



3**(e)** Elementary trees for the idiomatic reading.

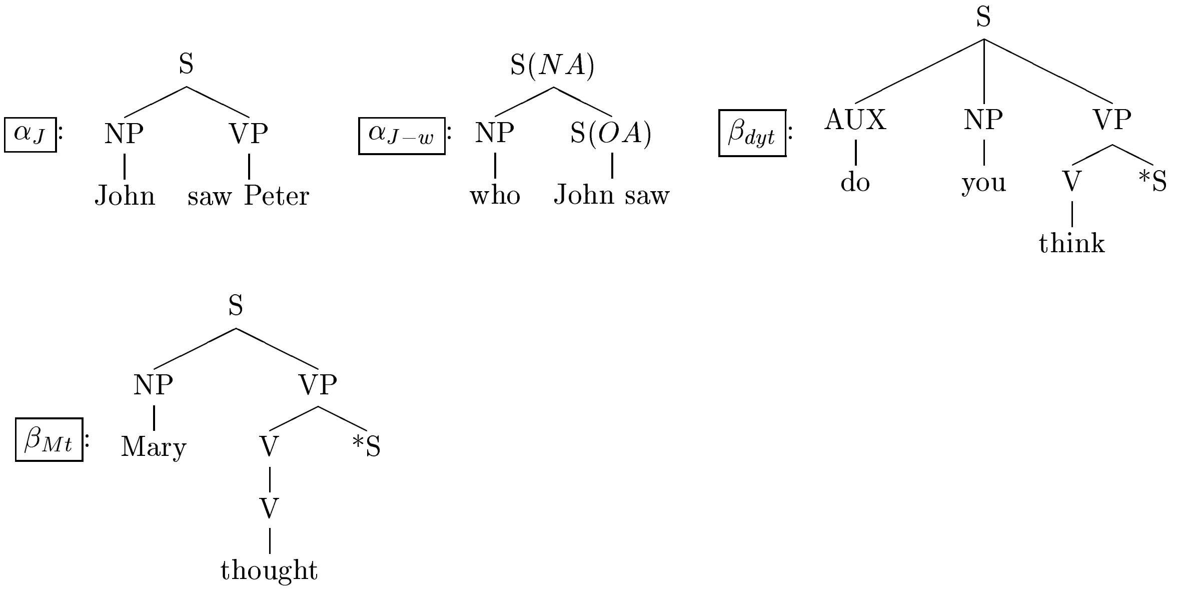


4. [Joshi, Vijay-Shankar, and Weir, 1991] TAG with adjunction constraints generating $\{w\#w : w \in \{a,b\}^*\}$. No TAG without adjunction constraints generates the same set of strings.



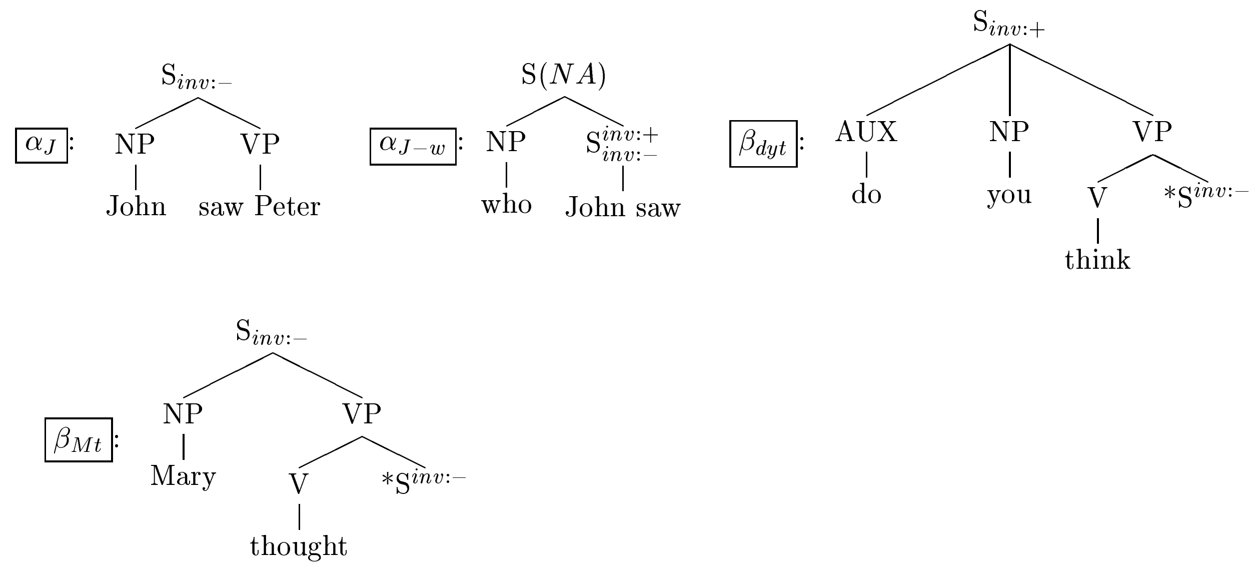
5. Using feature-based TAGs. Examples from Vijay-Shankar and Joshi (1988).

5**(a)** Another TAG with adjunction constraints (some structure abbreviated).

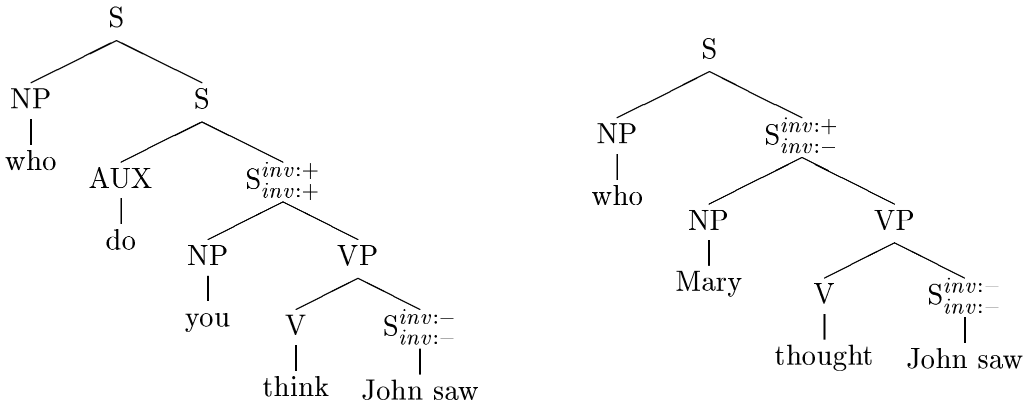


5**(b)** John saw Peter.
5**(c)** Who do you think John saw?
5**(d)** Who do you think Mary thought John saw?
5**(e)** Mary thought John saw Peter.
5**(f)** Who Mary thought John saw.

5**(g)** Feature-based TAG.



5**(h)** Adjoining β_{dyt} into α_{J-w} at address 2 vs. adjoining β_{Mt} into α_{J-w} at address 2.



5**(i)** Derivation tree for "Who do you think Mary thought John saw".