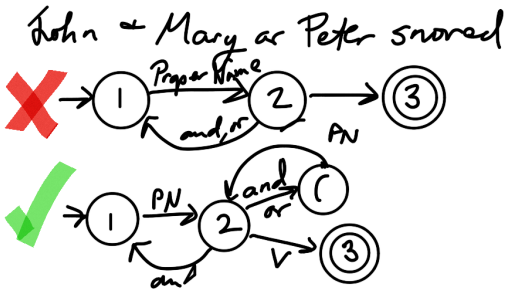
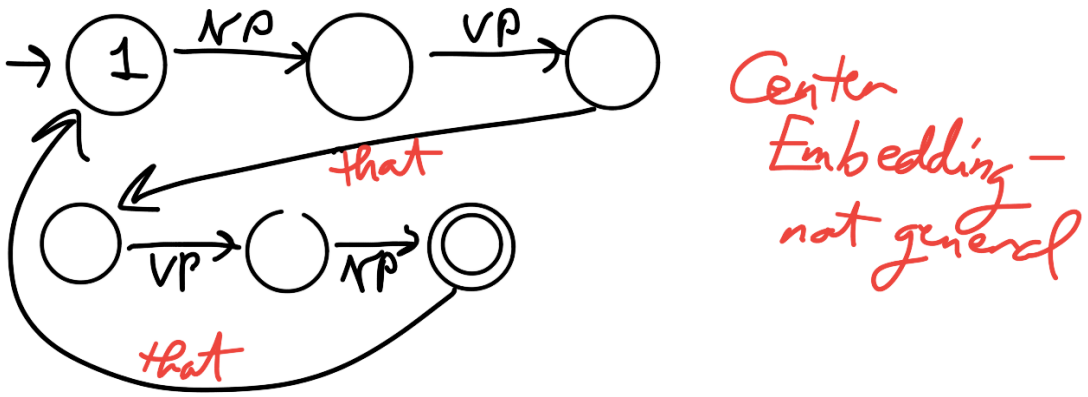
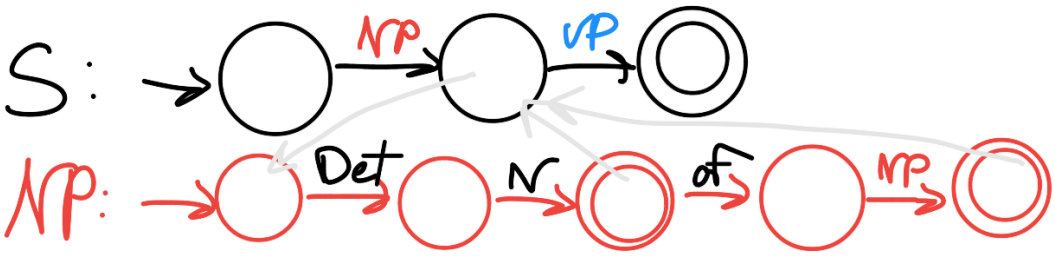
2 - Aug 28th, trees from string models



Depending on the run over the string, we can get additional structural information.

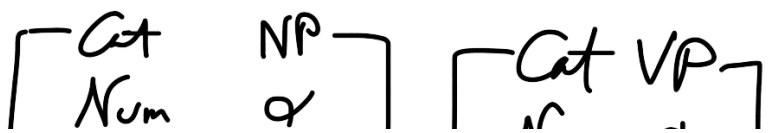


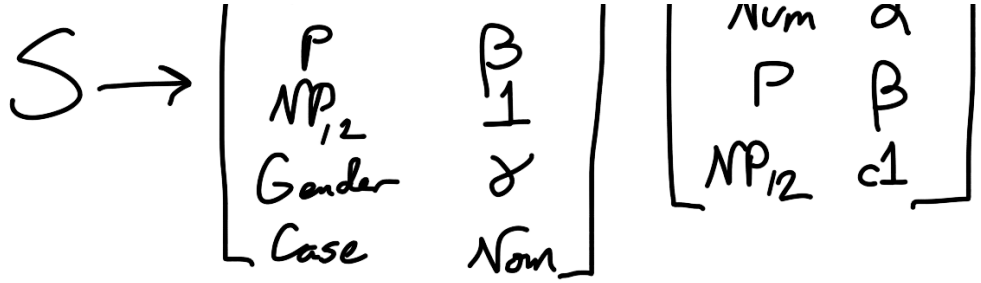
- tree structure —> eliminates redundancy, allows for generalizations —> Recursive Transition Network RTN. as long as no unbounded recursion, evaluates to FSA, but also tree-like.



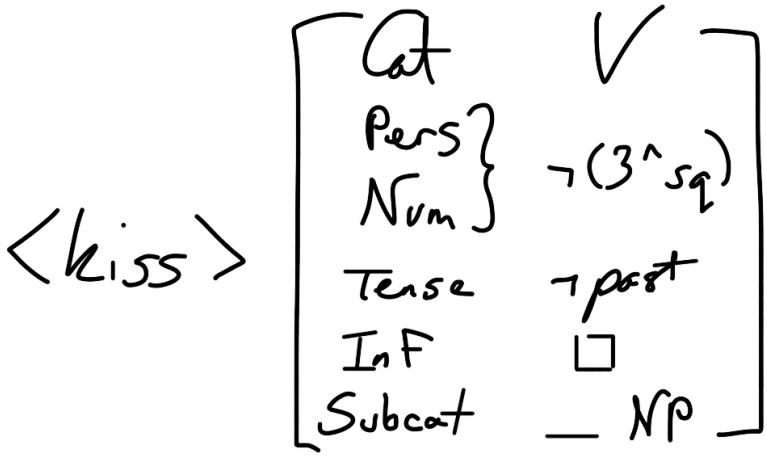
- Competence/Performance - the distinction doesn't actually matter. The recursive cut-off is so deep it isn't interesting to us.

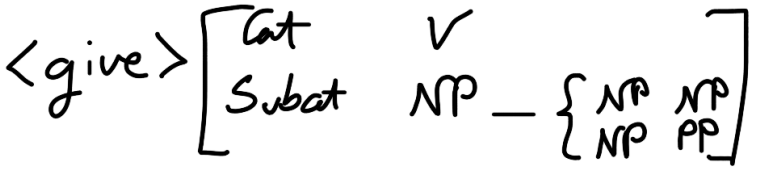
- Context Free Grammar
  - Phrase Structure Grammar
  - Attribute Value Matrices - introduced to simplify FSAs by allowing more general rules

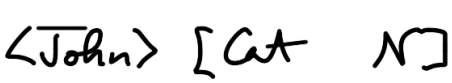


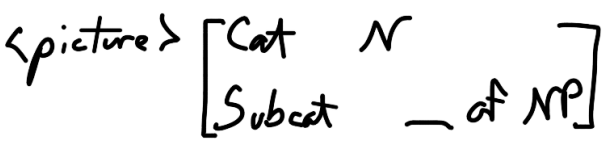


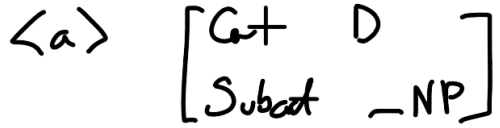
- GSPS - Generalized PSG, Gazdar, Klein, Pullum, Sag 1985
- ECPO - Exhaustive Constraint Partial Ordering
  - Divides into immediate precedence rules and dominance rules

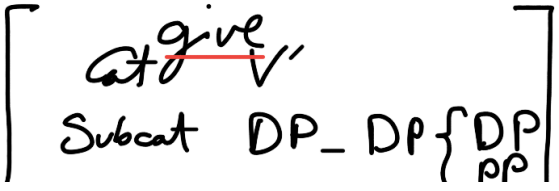


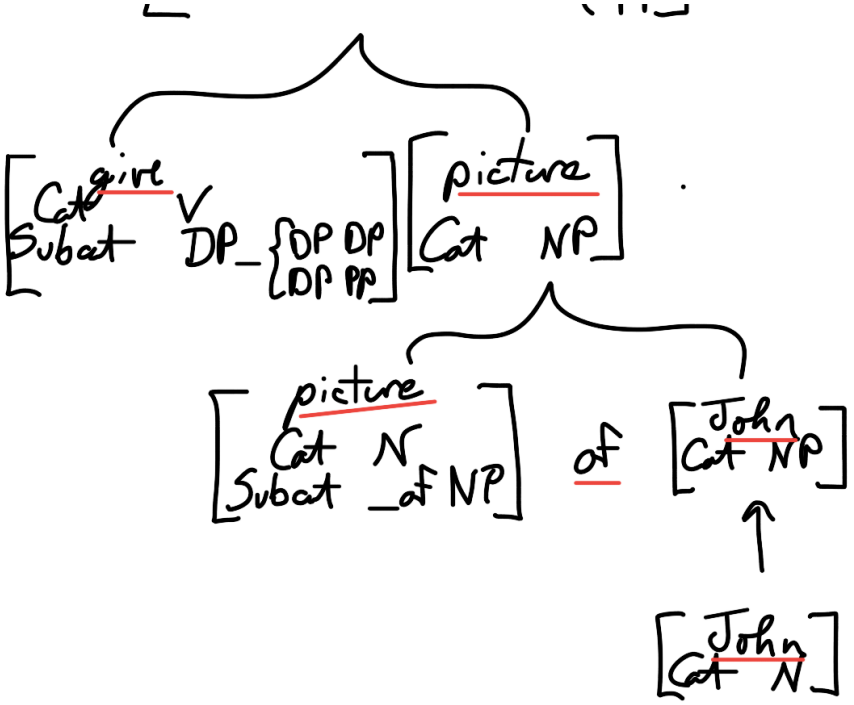




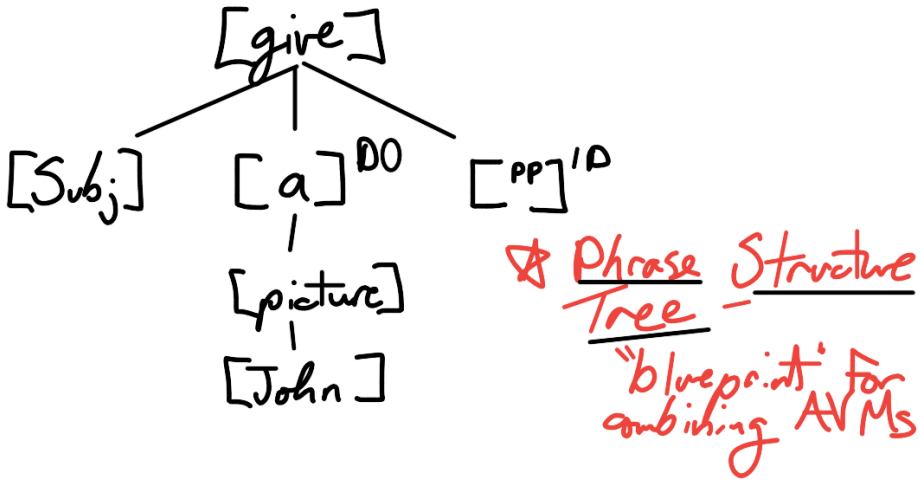




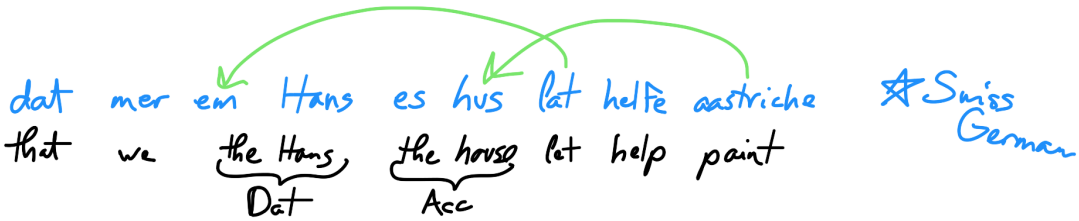




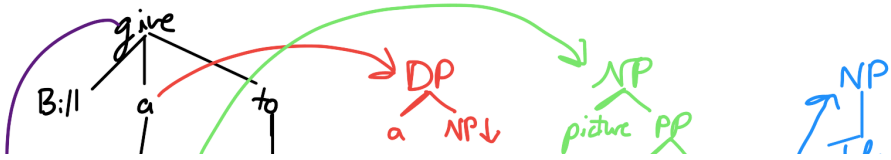
- CFG —> PSG —> AVMs —> Lexicalization

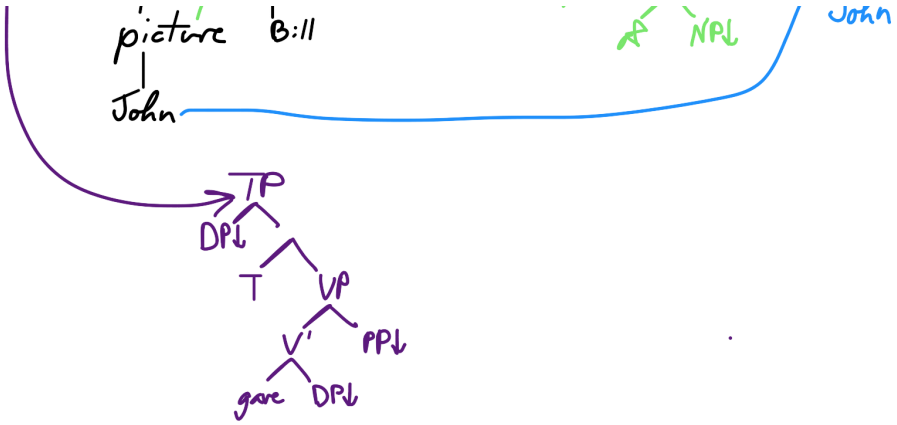


- Crossing dependencies go beyond the context-free boundary (the same way center embedding is non-regular). CFG accounts for nesting but not crossing.



TREE ADJOINING GRAMMAR




picture
Bill
John
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