CS 6740/IS 6300, Lecture 13
Concluding discussion on syntactic (and some semantic) modeling

Forgive speech-recognition errors in this document.

1. My "informal" (= " 'formal' second") teaching approach: explain *why* I'm teaching something (which hopefully corresponds somewhat to why *you should know* something) **before** introducing the actual content.

   I've also stayed pretty high-level in lecture.

   a. a grad course should give you some exposure and background, but graduate training should train you to teach yourself
   b. I assume students are more motivated and able to retain material if they know what it's good for
   c. Life lesson: if people aren't given a reason for something you do, they can come up with surprisingly different interpretations of your actions
2. most important (to me):
   a. mind expansion/creativity inspiration:
      i. two very different novel formalisms for modeling a phenomenon
      ii. and as for how you might develop, critique, or evaluate your own or someone else's formalism
   b. dynamic programming ideas - break situations into states, and try to keep the states "small"
3. icing:
   a. an appreciation for the complexities of language
      i. Glossed over: individual lexical features are really important. Properties of languages other than English (although we briefly glanced at Korean XTAG)
   b. inspiration for ways to combine syntax and semantics

From Christopher Potts, A case for deep learning in semantics: Response to Pater, *Language* 2019: "I see two angles on the preference for RNNs over more richly structured models..... However, I suspect DL [Deep Learning] researchers would eagerly adopt tree-structured models if they showed consistent benefits, but so far they have not. It would be hasty to conclude that this tells us that language is not tree-structured, though. It is safer to conclude that the tree structures we are assuming are simply incorrect enough that they get in the way. Data-driven techniques like those of DL could help us discover the right trees."