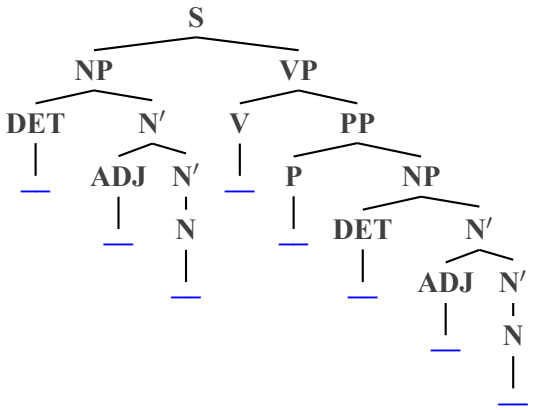
Your Name:_____

LIGN101 Homework 3 - Will Styler, Fall 2020

Be sure to include your name at the top of the homework sheet. Homeworks may be typed (many PDF reader applications can type on top of documents) or handwritten legibly. Please do your best to make your answers concise, you are graded on quality, not quantity. For generating syntax trees, you may hand-draw, or use a tool like `http://ironcreek.net/phpsyntaxtree/` *to generate them online.* ***You will need to scan your homework, in this exact form and format, to submit it! Use Gradescope's scanning guide (`https://www.gradescope.com/help`) and please leave adequate time!***

1. For the following questions, bubble in the circle completely. (2 points each)

   (a) Which of the following sentences could the below syntax tree belong to?



   ◯ Danica flew a deadly fighter jet.

   ◯ The new student bought many boring books.

   ◯ Some big, angry robots circled around the human.

   ◯ My favorite cousin ate the cake at a wedding.

   √ **The dystopian future arrived in your phonology homework.**

   (b) You're given the sentence "Siri's Holographic visage advised switching to a LING Major.". Asking the question "What did Siri advise?" will isolate which of the following constituents?

   ◯ S √ **VP** ◯ PP ◯ NP ◯ CP

   (c) Which of the below LIGN 101 Phrase Structure rules for English will, **entirely on its own**, allow for recursion?

   ◯ CP -> C S ◯ PP -> P NP √ **NP -> NP PP** ◯ VP -> V NP ◯ NP -> DET N'

   (d) Which of the below LIGN 101 Phrase Structure rules for English **is not needed** to describe the sentence "My frustrated kitten craved some kobe beef for dinner."?

   ◯ PP -> P NP √ **VP -> V** ◯ NP -> DET N' ◯ N' -> ADJ N' ◯ N' -> N

2. Answer the following using the sentence "The unfrozen student wondered why everybody fixated on those obscure phonological questions." For each question, write only the words, without quotes or punctuation, in the box below the question. (4 points each)

   (a) Write two words which together *form a syntactic constituent* in this sentence:

   (b) Write two words which together ***DO NOT*** *form a syntactic constituent* in this sentence:

   (c) Write the first (in order of appearance) NP in this sentence:

   (d) Write the largest (in number of words) NP in this sentence:

   (e) Write the largest VP in the sentence:

   (f) Write the PP in the sentence:

3. Choose a complete English sentence from your favorite book, song, or movie which contains at least an NP, a VP, a CP, and a PP. Below, you're going to show us that you understand constituency by showing us the "chunks" of the sentence which represent each constituent. So, if the sentence was "Alicia loved that students declared LING majors at the event.", and I asked you for the NP, you would write 'LING Majors'.

   (a) Write the entire sentence (0 points)

   (b) Write the entire noun phrase (if there's more than one, choose one) (4 points)

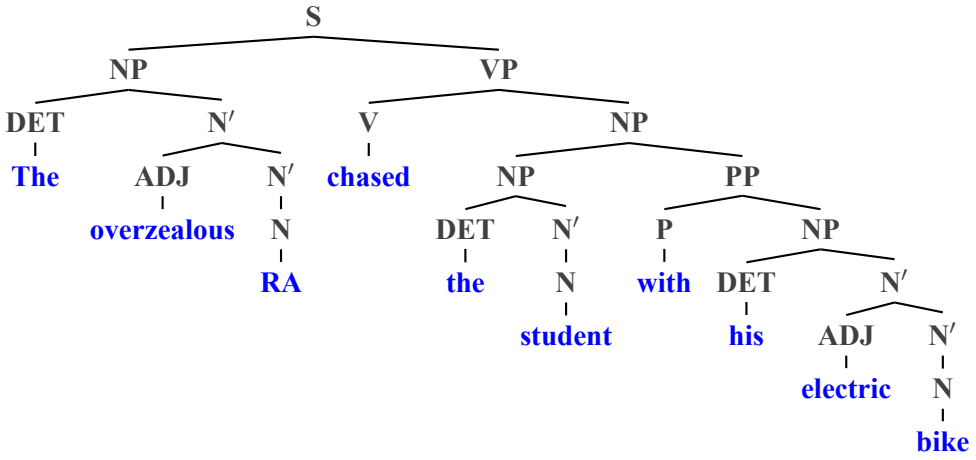
   (c) Write the entire verb phrase (4 points)

   (d) Give the entire complement clause (e.g. everything under 'CP') (4 points)

   (e) Give the entire prepositional phrase (4 points)

4. The sentence "The overzealous RA chased the student with his electric bike" is structurally ambiguous, as we're not sure whether this means that the student stole the RA's bike (and the RA was chasing on foot), or the student was running on foot, and the RA was chasing on a bike.

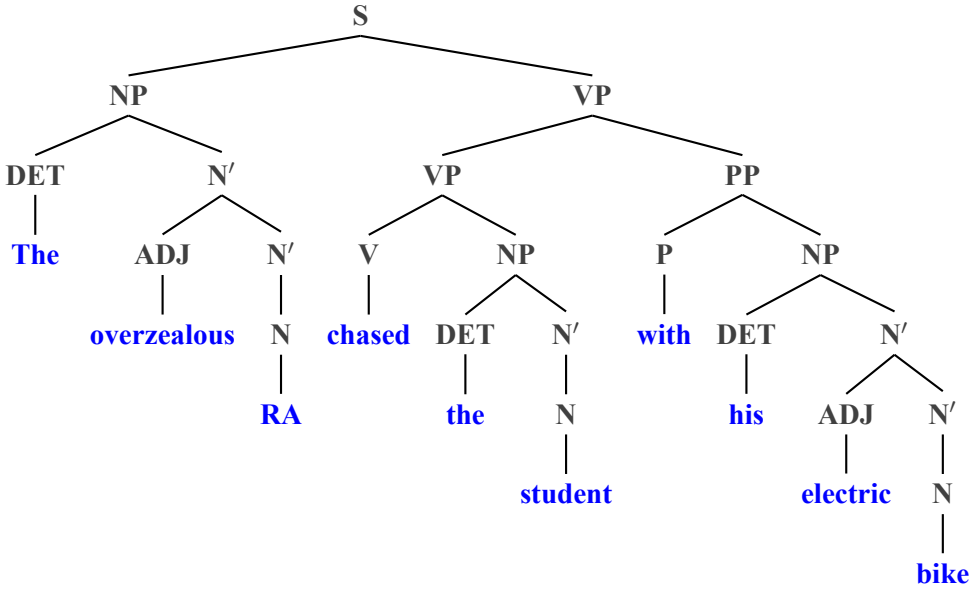
   Below, I've given you a syntactic tree of the sentence which will clarify:



   Draw a syntax tree showing the constituency structure of the alternative reading (that is, of the other structure which this sentence could have, which would result in the other meaning). (12 points)

Solution:

If they don't move the PP to up to the NP, no credit. If they get that part, but make another mistake, then 3 points.

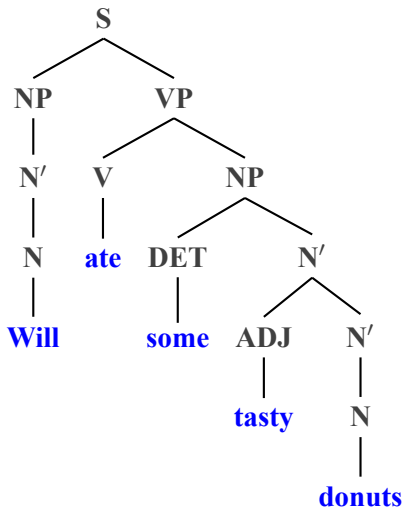


5. Draw the FULLY DETAILED syntactic structure, including all N' and N levels, for the following sentences according to the phrase structure rules we have introduced in class. Draw the tree *entirely within the provided box*. (10 points each)

   (a) *Will ate some tasty donuts.*

Solution:

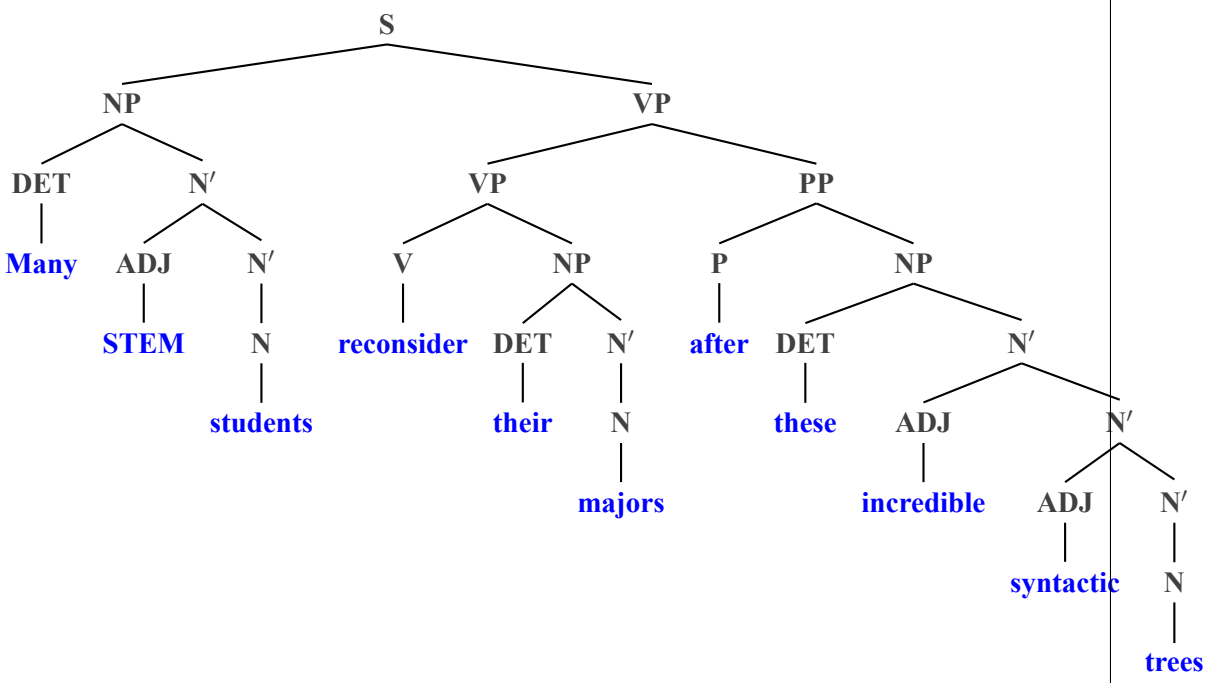
For these questions, deduct one point per bad branching, including for missing intermediate N' levels. Meaning, if they give you S -> NP VP PP, that's one bad branching, minus one point. If they then claim that that NP -> CP ADJ VP on the next node, that's another bad branch, another point. Added branchings which do not actually belong (e.g. they add a CP where none is needed) are also a single point deduction. If they analyze the sentence plausibly, according to our PS rules, but with a different outcome, you may grade your conscience or email me.



(b) *Many STEM students reconsider their majors after these incredible syntactic trees.* (Treat 'STEM' and 'syntactic' as adjectives.)

Solution:

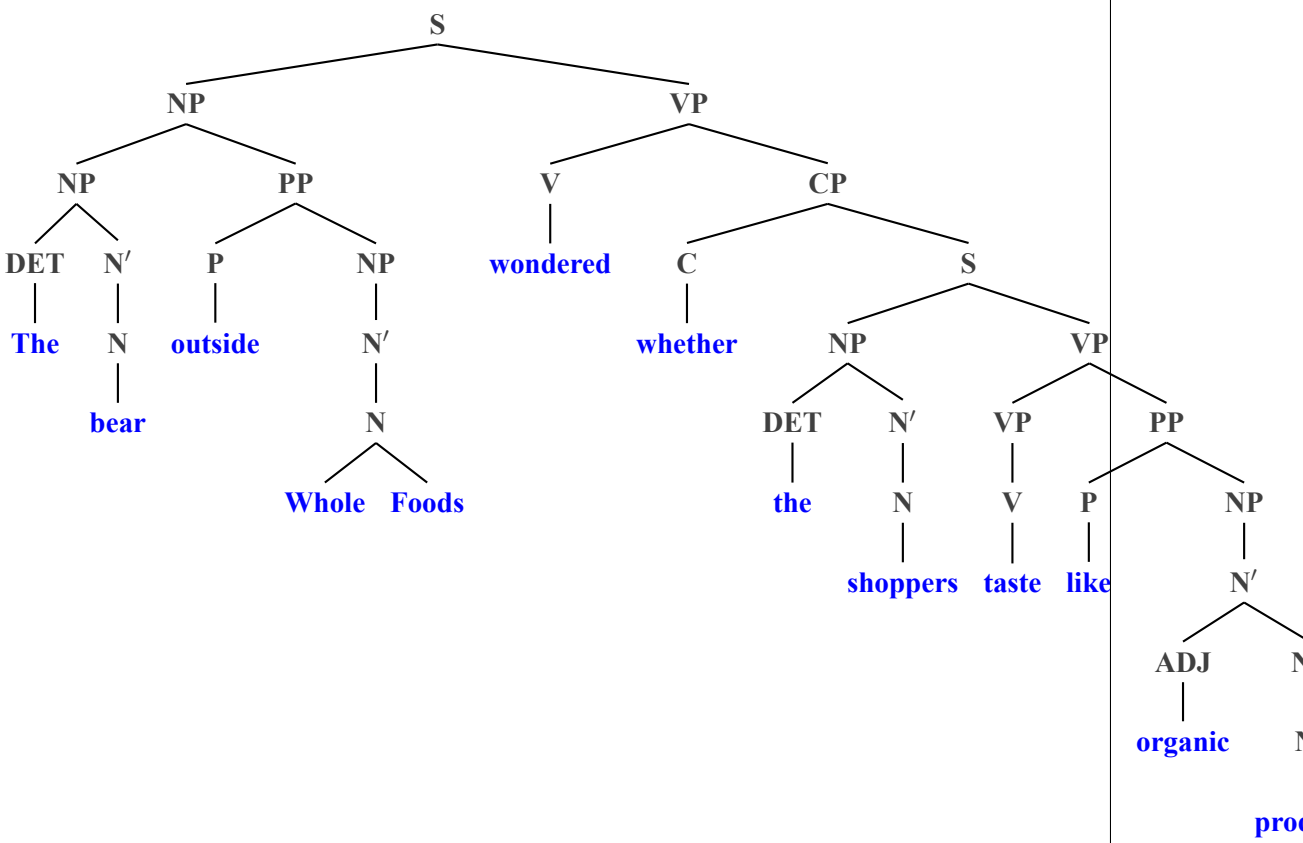
See above.



(c) *The bear outside Whole Foods wondered whether the shoppers taste like organic produce.* (Treat 'Whole Foods' as a single N, and 'like' is a preposition here.)

Solution:

See above.



6. Now, I want you to diagram the sentence 'The blue toy that the dog loves squeaks.'. You'll quickly discover, though, that you need one additional phrase structure rule that you haven't been given to make this work. Create a rule, using the same format and list of categories (e.g. 'NP', 'VP, 'C', and so forth) as our existing rules, tell us the rule and why, then give us a tree for the sentence which takes advantage of this rule. (6 points)

Solution:

They'll need N' -> N' CP