

# Syntax I

FSEM CORE S119: *Language as Human Nature*

Fall 2025

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## Warm-up

1. Fall is here! Discuss with your neighbor the best type of apple.
2. Consider the following data. Mark with a star the sentences which are not well-formed (i.e., ungrammatical) in Standard American English (the dialect we use in this class).
  - (a) dog the cat a windows near bit
  - (b) the cat are outside the room
  - (c) tuesday is the second work day of the week
  - (d) shattered grapes devour yellow moons wistfully

## Logistics

- Office Hours 3-6PM - stop by and work on Report 2
- Report 2 due Oct 9
- Prof. Elodie Fourquet is sitting in on the class today to observe my teaching

## Learning Objectives

- Describe the basic aims of syntax
- Apply constituency tests to identify constituents
- Build a syntax tree structure
- Propose some syntactic rules

*Summary:* We begin with the basic motivation of syntax. Then, we lay out some basic tests to identify syntactic units. We conclude with syntactic structures and rules and demonstrate their utility in identifying variation between languages.

## Basic Aims of Syntax

SYNTAX IS THE STUDY OF SENTENCES. As with phonology and morphology, we have a division of labor between basic units and rules that characterize our ability to generalize.

In syntax, the basic unit are words (formed via morphology). In the coming days we will build out the toolkit we need in order to describe syntactic rules.<sup>1</sup> Let's build some intuitions for what is going on with strings of words.<sup>2</sup>

### Practice Problems

1. Grab a stack of words from the front
2. Working with a partner come up with 10 sentences that use all of the words. It is helpful to move the index cards around to accomplish this. Write them in Table 1.
3. Are all combinations of the words sentences of English? Give concrete examples.
4. With the group next to you compare your sentences. Did you produce the same sentences? What do you make of the similarities and differences?
5. Are there groups of words that seem never to appear together in a particular order? Give concrete examples.

<sup>1</sup> As with morphology, evidenced by the plural marker in English, there are interactions between the levels of linguistic representation/theory that we have been discussing so far in class. That is, phonology interacts with morphology and syntax, morphology with syntax (as in inflectional affixes) and phonology (as with allomorphy). We will not dwell on long on these interactions in this class, but these interactions are limited in very interesting ways that we can use to understand the mental processes underlying the formation of utterances.

<sup>2</sup> The below exercise is adapted from Language Files.

01.  
03.  
05.  
07.  
09.

02.  
04.  
06.  
08.  
10.

Table 1: Put your English sentences here.

## Basic Units Words and Constituents

AS WE BRIEFLY DISCUSSED WITH MORPHOLOGY, words have a part of speech associated with them. In English, these are the standard ones (written with the shorthand we will use in this class).<sup>3</sup>

- Nouns (N): Fig, fig, solidarity
- Verbs (V): eat, sleep, believe
- Determiners (D): the, a, this, that
- Prepositions (P): in, near, across
- Adjectives (A): tall, toasty, burnt
- Adverb (Adv): wistfully, quickly, well

N   V   V   D   A   N  
I   will   find   the   red   book

In morphology, we took morphemes and formed words. In syntax, we take words and form constituents (and then sentences, which are a special class of constituents). **Constituents** are a unit of syntax that represents a coherent grouping of words (which may have been part of your process for forming sentences above). For example, *the red book* is a constituent. There are a few tests we can use to determine if something is a constituent:

- **Topicalization:** In English, you can emphasis something by ‘moving’ it to the far left of a sentence.
  - the red book, I will find
  - \*find the red, I will book
- **Coordination:** You can coordinate two constituents (of the same type) in English
  - I will find the red book and the blue pencils
  - \*I will find the red and lose a blue book
- **Answer to a Question:** Constituents can be given as answers to questions
  - What will you find? The red book
  - ??? - find the red

<sup>3</sup> There are some additional distinctions which we may make. This includes, separating pronouns (e.g., he, she they, xe) from nouns, tense (e.g., will, -ed) from verbs, and modals (e.g., might, would, could) from verbs.

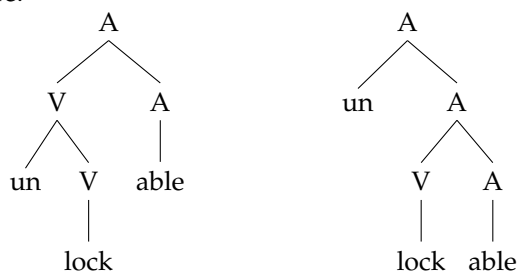
- **Clefting:** In English, you can form cleft sentences around constituents
  - It is the red book that I will find
  - \*It is find the red that I will book

### Question

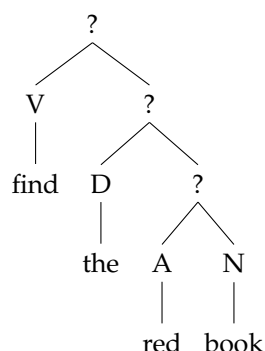
Identify at least 3 constituents and 1 non-constituent from your sentences at the beginning of class. Argue using the constituency tests.

### Accounting for Constituents

SYNTAX IS FUNDAMENTALLY ABOUT the study of the hierarchical structure of sentences and the processes that account for them. We have, in fact, already made some progress building hierarchical structure:



Syntax works with a very similar structure. For example, we can build the structure for part of the sentence 'I will find the red book' as below, with the ? marks to be filled in together soon:



## Question

Based on our study of morphology, see if you can come up with a hypothesis about the missing labels (in ?).

### *Basic Phrase Structure Rules*

RECALL HOW WE CREATED RULES for morphemes.<sup>4</sup>

$$X \rightarrow Y + Z$$

Where,

- X is a part of speech
- $\rightarrow$  means “can be created from”
- Y is a part of speech
- Z is the relevant morpheme
- + means “combined with”
- “X can be created from Y combined with the morpheme Z”

We can modify this to apply to syntax by changing Z to be a part of speech. In English, for example, we might propose a rule like:

$$N \rightarrow A + N$$

<sup>4</sup> This is lightly adapted from what we discussed. Namely, we have dropped the discussion of phonemes.

**Practice Problems**

1. Propose a hypothesis for the tree structure of the following sentence. Argue for your idea!

I will find the book on the shelf

2. Consider the following example sentence from Japanese (and the English gloss). Propose a syntactic rule for an aspect of Japanese.

Japanese	English Gloss
Keisha-w sushi-o taberu	Keisha.Nom sushi.Acc eats

3. What is the difference between Japanese and English that is highlighted by your rule?

**Before Next Class**

- Reading and pre-class quiz for Thursday Oct 2
- Make progress on Report II !