Syntax III

FSEM CORE S119: Language as Human Nature
Fall 2025
Prof. Forrest Davis

October 7, 2025

Warm-up

1. Is summer here? Discuss with your neighbor the best place on campus to sit outside.
2. Draw a tree for 'the cat pushed the toy'

Logistics

- Report 1 posted
  - Revisions due Oct. 21
- Report 2 due Oct 9
- Course Observation Thursday

Learning Objectives

- Describe X' Schema and the generalization captured by it
- Build structures for sentences like 'Fig thinks that he is always hungry'
- Describe yes-no question formation in English and use our hypothesis to describe why some sentences are ungrammatical

Summary: We first note the difference between competence and performance. Then, we expand our syntax toolkit to include Complementizer Phrases (CPs) and give a formal account for yes-no question formation in English.

Our Goal in the Next Few Classes

THERE ARE SOME FACTS ABOUT ENGLISH THAT ARE WEIRD, but that you may not reflect on very often:

- What will Mary write on a typewriter? (cf. Mary will write what on a typewriter)
- Does Mary like food? (cf. Will Mary like food?)
- Mary's mother admires her (cf. Mary's mother admires herself)
- Bob thought that Bill hated himself (cf. Bob thought that Bill hated him)
- It will rain (cf. *The cat will rain)

In the next few classes, we are going develop the tools to describe what may be happening with these sentences and how languages differ in the choices they make in building similar structures. **Today, we will tackle question formation processes in English.**

Infinite Sentences

HOW MANY SENTENCES ARE THERE IN ENGLISH? Consider the following data:

		Bill loves food
	Karen thinks that	Bill loves food
Sue thinks that	Karen thinks that	Bill loves food

In order to properly answer the question of how many English sentences there are, we have to distinguish between competence and performance. Consider some illustrative examples of the difference:

The keys to the door are on the table	The key to the doors are on the table
The rat the cat chased ate the food	The rat the cat the dog bit chased ate the food

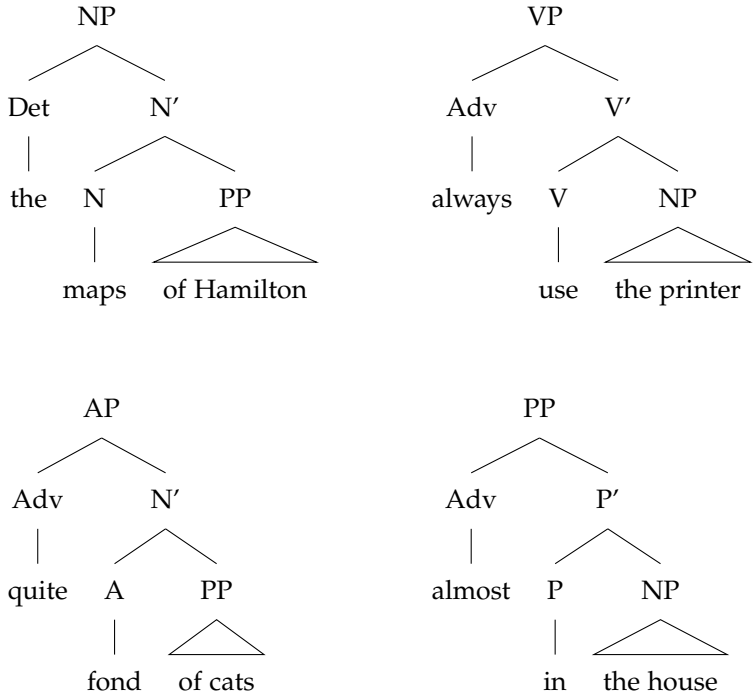
In actually using language, we make mistakes or particular sentences become too complicated for us to easily understand. With sustained thought, we can often fix these mistakes or understand the sentences. This tension is between what is valid given our (individual) grammars, called **competence**, and the messy state of the world, called **performance**. In theoretical linguistics, we are primarily interested in competence, though performance sheds interesting light on competence and is often studied (especially in the field of psycholinguistics).[1]

[1] Note, this distinction, while often considered radical, is not dissimilar from the distinctions made in other sciences. In the study of gravity, we posit a universal acceleration that applies to all items regardless of their mass. Nonetheless, on Earth, in many conditions, we can observe that a feather takes longer to fall than a rock. These difference is interesting in so far as we learn about another property, namely air resistance, and is distinct from the account of gravity.

A Different Perspective on Building Structure

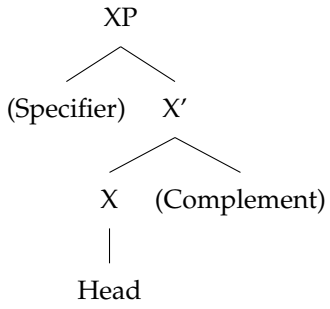
WE HAVE CONSIDERED PHRASE STRUCTURE RULES, like S →NP VP. There is another, more modern, way of understanding syntactic structure, and phrases in particular.[2]

[2] In syntactic theory, we use triangle as a shorthand for a phrase to abstract over some structure for ease of presentation.



There is a **head** (e.g., maps, use, fond, in) which is the core and required component of the phrase, and a **specifier** (e.g., the, quite, always, almost) and a **complement** (e.g., of Hamilton, the printer, of cats, the house) which represent refinement of the meaning. There is a universal structure to this, called **X′ Schema**:[3]

[3] X′ is pronounced X-bar.



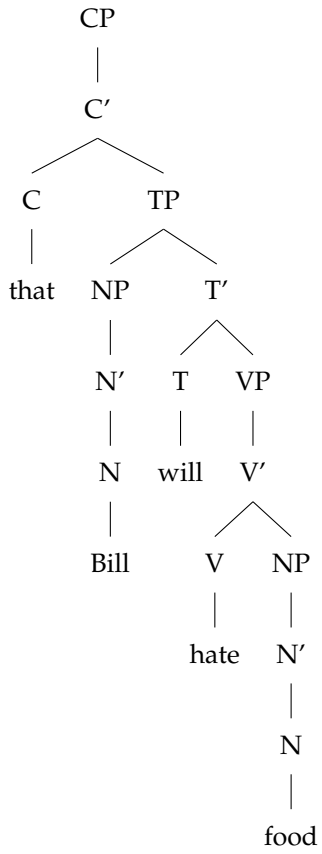
Notice, we can think about the types of complements and specifiers that different heads select (e.g., verbs select adverbs and preposition phrases as specifiers and noun phrases as complements). We call the operation that combines these units together to build this X′ Schema for phrases **Merge**.

Practice Problems

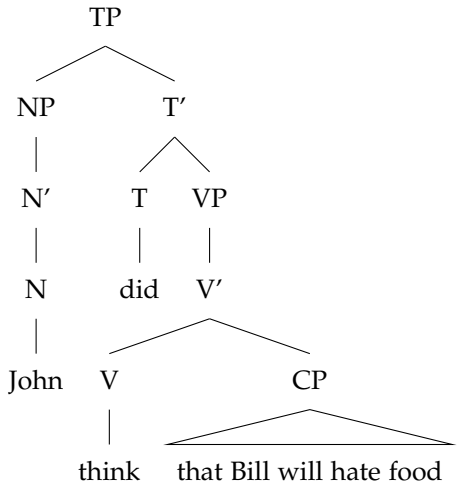
Using the X′ structure we just discussed and the TP structure from last class, build a tree for 'Bill will quickly dodge yellow cats'.

Complement Clause Structure: CPs

VERBS SELECT FOR THINGS OTHER THAN NOUN PHRASES. Consider the sentence 'John did think that Bill will hate food'. Here the verb 'thought' is selecting for a sentence ('Bill will hate food'). We need some way of represent this additional structure. To do so, we will consider *that*, called a **complementizer**, to be a head which selects for a TP:



This CP is then the complement of the main verb ‘think’:



Practice Problems

Draw a tree for 'the boy believed that some cats had slapped the book of poems'.

Before Next Class

- Reading and pre-class quiz for Tuesday Oct 9
- Make progress on Report II !