

What is Grammar and How Do We Study It?

Introduction	1
What is English? Language Change and Variation	2
What is Grammar? Prescriptive and Descriptive Grammar	4
Origins of Prescriptive Grammar	8
The Components of Grammar	10
<i>Syntax</i>	10
<i>Morphology</i>	13
<i>Semantics</i>	15
<i>Phonetics and phonology</i>	18
The Scientific Study of Language	19
Exercises	20

Introduction

Humans have always been fascinated by language, and the study of language has always been a fundamental part of intellectual inquiry. In fact, the study of language forms the core of the social and behavioral sciences as well as the humanities, and is unique in crossing such interdisciplinary boundaries; we can study the psychology of language, how children acquire language and how speakers and signers process it and understand it; we can study the biology and neurology of language, and what it tells us about the organization of the brain; we can study language as a social tool, how we use it to express our identities as members of different social groups; we can study the language of literature and artistic expression.

We can also study the internal structure, or *grammar*, of language, which is what we will focus on in this book. Our goal is to help you discover some of the organizing principles of grammar, by studying how English works. This book is not a “how-to” book on “good English,” nor is it a comprehensive or precise description of English grammar. In fact, we use the term “English” broadly here; what we call a single

Navigating English Grammar: A Guide to Analyzing Real Language, First Edition.

Anne Lobeck and Kristin Denham.

© 2014 Anne Lobeck and Kristin Denham. Published 2014 by John Wiley & Sons, Ltd.

language is more accurately described as a (vast) collection of different varieties spoken by both native and non-native speakers around the globe. We will provide you with some tools to help you explore the structure of whatever variety of English you speak; you will become familiar with syntactic categories (parts of speech), heads and phrases, subordination, coordination, modification, and complementation. Our approach to grammatical structure is descriptive; we will explore and describe language data, data that reveals your intuitive knowledge of grammar. This scientific approach to the study of grammar will be different from the more familiar “school” approach, in which you learn grammar and usage rules with the goal of learning to speak and write “correctly.” Rather, what you learn here will provide you with important tools of critical analysis to make your own informed decisions about grammar and usage.

Along with our study of the structure of English, we will explore how language changes over time, and varies from place to place. We will explore public perceptions of grammar, including what constitutes a grammatical “error;” attitudes about “good” and “bad” language; notions of “standard” versus “non-standard” English, and more. This book will not only introduce you to the fundamentals of English sentence structure, but will also provide you with an important context for the study of grammar, its influence on other areas of modern thought, and the study of language more generally. In the course of navigating English grammar, we also think that you will find that the study of language is fascinating and often really fun.¹

What is English? Language Change and Variation

Before we tackle what we mean by *grammar* in more detail, we need to explore what we mean by *English*. It’s actually quite difficult to explain what English is once you think about it; English (like other languages) is a continuum of (many) different language varieties or dialects. According to recent surveys, English is the native language of 322 million people, and the second language of 120 million more (Weber, 1997; Comrie, 1998; *Ethnologue*, 2005). With upwards of 440 million speakers of English around the world, it’s no surprise that there may be varieties of English that sound familiar to you, and others that you have never heard before.

Here are a few examples of sentences from different varieties of English from both inside and outside the United States.

- That’s me away. (“I’m going now.”) (Scots English)
- That house looks a nice one. (Varieties of British English)
- They went a-hunting yesterday. (Appalachian English)
- We might should do that. (Varieties of Southern US English)
- I asked him where does he work. (Indian English)
- She’ll be right. (“Everything will be all right.”) (Australian English)

Complicating the notion of what we think of as “English” is that languages change, sometimes quite dramatically, over time. Any of you who have studied Old English (spoken around 445–1000 CE) for example, know that Old English looks very little like

modern, or Present Day English. Yet, we still call Old English “English.” Consider this passage from the Old English poem *Beowulf*, written in about 700.

Hwæt! We Gardena in geardagum,
Listen! We of the Spear-Danes in days of yore,

þeodcýninga, þrym gefrunon,
Of those folk-kings, the glory have heard,

hu ða æþelingas ellen fremedon.
How those noblemen brave-things did.

Oft Scyld Scefing sceaþena þreatum,
Often Scyld, son of Scef, from enemy hosts,

monegum mægþum, meodosetla ofteah,
from many people, mead-benches took,

egsode eorlas.
terrorized warriors.

Middle English (spoken around 1100–1400) looks more like Present Day English, but is still clearly not what we would consider contemporary. Here is an excerpt from Geoffrey Chaucer’s *The Wife of Bath’s Tale*, from his famous *Canterbury Tales* written at the end of the fourteenth century.

Experience, though noon auctoritee
Experience, though no authority

Were in this world, is right ynogh for me
Were in this world, were good enough for me

To speke of wo that is in mariage;
To speak of woe that is in marriage;

For, lordynges, sith I twelve yeer was of age,
For, masters, since I was twelve years of age,

Thonked be God that is eterne on lyve,
Thanks be to God Who is for ever alive,

Housbondes at chirche dore I have had fyve –
Of husbands at church door have I had five –

If I so ofte myghte have ywedded bee –
If I could have been married so many times –

And alle were worthy men in hir degree.
And all were worthy men in their degree.

And Early Modern English (1500–1700), though much more familiar, is still a little different. Here is an excerpt from Shakespeare’s *Hamlet*. We may not need a translation anymore, but this 400-year-old version of English is still quite different from English spoken today.

To be, or not to be: that is the question:
 Whether 'tis nobler in the mind to suffer
 The slings and arrows of outrageous fortune,
 Or to take arms against a sea of troubles,
 And by opposing end them? To die: to sleep
 No more; and by a sleep to say we end
 The heart-ache and the thousand natural shocks
 That flesh is heir to? 'Tis a consummation
 Devoutly to be wish'd. To die, to sleep;

We learn from studying language change and variation that not all of us speak the same variety or dialect of English, and whatever variety we do speak continues to change. As we will see as we progress through this book, all varieties, or dialects of English are worthy of investigation and can be explored using the tools of analysis we will introduce to you here. This is something of a departure from what you may have learned in school, namely that studying English grammar means learning a single set of rules in order to avoid errors. In fact, there is no such single set of hard and fast rules of English grammar, and languages are actually dynamic systems, constantly in flux. So an approach to English as a set of rules to memorize doesn't tell you anything about how English actually works, nor do such rules accurately describe the grammar of the language.

What is Grammar? Prescriptive and Descriptive Grammar

When you hear the word *grammar*, what comes to mind? Over the years, we have asked countless students this question, and most agree that in school, the study of grammar is connected (often exclusively) to the study of writing. For them, grammar covers a broad range of rules, including punctuation rules (where to put commas and apostrophes, for example), vocabulary rules (use *active* verbs rather than *be* verbs; avoid “slang;” use “academic” vocabulary), spelling rules (don't mix up *they're*, *their*, and *there* or *you're* and *your*), as well as other injunctions such as “Never start a sentence with *because*;” “Never end a sentence with a preposition;” “Don't use first person;” “Don't use passive voice;” “Avoid fragments;” “Use *I* instead of *me* and *who* instead of *whom*,” and so on.

You have also probably heard certain words or phrases labeled as “correct” or “incorrect” grammar, or as “proper” or “improper” grammar. You may even have heard certain words or phrases referred to as “good” or “bad” grammar, or even as “lazy” or “sloppy” grammar. For example, many of you are probably aware that *I don't know nobody* is considered “bad grammar,” and that such dreaded “double negatives” should at all costs be avoided. There are probably other words or phrases (such as *ain't* or *I seen it*) that you would put in the same category of “bad grammar,” and that you may have learned to avoid, especially in your writing.

This view of English grammar as “good” or “bad” has its roots in seventeenth-century England, when speaking and writing “correctly” came to be considered a key to social success, and a variety of English spoken in London came to be considered “standard.” Other dialects were therefore considered “non-standard,” and of lower

social prestige. This period saw the rise of English *prescriptive* grammar, rules that dictate how one *should* speak or write. It was during this period that rules such as “don’t end a sentence with a preposition,” and “don’t split infinitives” emerged, many of which were based on the grammar of Latin, the language of scholarship at the time. We explore the roots and legacy of prescriptive grammar and attempts to standardize English in a later section. For now, simply note that it was during this period that grammar began to be perceived as a collection of rules that could be followed or broken, and that certain forms and usage were perceived to have higher social value than others.

Prescriptive grammatical rules, the rules of how you should speak and write a language, according to some authority, are typically those you consciously learn in school (and outside it) from anyone you consider a language authority, and as the terms “good” and “bad” grammar illustrate, these rules have social, even moral, values attached to them. That said, not everyone agrees on what is considered “correct” or “incorrect;” different teachers may have corrected you for different things, and your parents and even your friends may have corrected you for yet other perceived errors. So there is some arbitrariness to the notion of “correct” or “good” grammar. There is also some arbitrariness to who (or *whom!*) we consider a language authority; although we might consider editors, professional writers, English teachers, and/or those in the news media authorities on correct grammar, almost anyone you ask has strong opinions about what they think is correct or incorrect, and almost everyone has grammar “pet peeves.” You may even have corrected others yourself!

Another important point about prescriptive grammar is that often, prescriptive rules are not rules of natural language (which is why we usually have to consciously learn them, and often forget to use them). Principles and rules of natural language underlie what we actually say, not what we “should” say, and are part of our unconscious knowledge of the language we acquire (under normal circumstances, children acquire their native language by about age five, effortlessly, and without instruction). In the following section we will explore some of the rules of natural language, to illustrate how they differ from other language rules that we consciously learn. (See Sobin 1999 for discussion of natural and “unnatural” language rules.)

Consider two well-known prescriptive rules, “don’t end a sentence with a preposition” and “use *whom* when questioning an object and *who* when questioning the subject.” According to these rules, you should avoid saying and writing sentences such as the following:

Who did you talk to?

Here, the sentence ends with the preposition *to*, and we have used *who* rather than *whom*. The prescriptively grammatical sentence is:

To whom did you talk?

While you may (or may not) be aware of these two prescriptive rules, most if not all of you would agree that you are more likely to say *Who did you talk to?* (and other similar sentences, such as *Which flight are you leaving on?* *Who did you buy the present for?*) in your

everyday speech, rather than *To whom did you talk?* (or *On which flight are you leaving? For whom did you buy the present?*). This evidence suggests that there is a difference between consciously learned prescriptive rules and the unconscious rules of your natural linguistic system. This linguistic system, or grammar, is revealed in the language of your everyday speech, and the rules that underlie this system are what linguists, language scientists, seek to discover and describe by studying linguistic data. This model of grammar is *descriptive* rather than prescriptive.

Descriptive grammatical rules, the set of unconscious rules that allow you to produce and understand a language, differ from the grammar rules you typically learn in school, and descriptive grammar and prescriptive grammar also differ in terms of what is considered *grammatical* and *ungrammatical*.

Any English speaker would say the following sentence is a possible sentence of English:

A dog bit the man.

But no English speaker would produce the following:

*Dog a the man bit.

The first sentence is a natural sentence of English, and is therefore, in terms of descriptive grammar, grammatical. The second sentence is not a possible sentence of English, and in terms of descriptive grammar, this sentence is ungrammatical (we use the linguists' convention of marking descriptively ungrammatical sentences with *). This simple example illustrates two very important concepts. One is that (all) speakers and signers have intuitive knowledge of what constitutes a grammatical sentence of their language, and also, what does not. It also illustrates that prescriptive grammar and descriptive grammar differ in terms of what we mean by *grammatical* and *ungrammatical*.

Using descriptive grammar, *grammatical* refers to a possible sentence in the language, while *ungrammatical* refers to an impossible sentence in the language. Using prescriptive grammar, however, *grammatical* means conforming to rules of how one should speak or write (according to some authority), while *ungrammatical* means not conforming to rules of how one should speak or write (according to some authority).

Let's continue to explore the distinction between descriptive and prescriptive grammar. The sentence below is a garden-variety English sentence, which is descriptively grammatical to any English speaker (whether or not they really eat bacon, eggs, or ketchup).

I eat bacon and eggs with ketchup.

We can form a question based on this sentence as follows.

What do you eat bacon and eggs with?

This sentence is descriptively grammatical but violates a prescriptive rule; recall that for some, ending a sentence with a preposition (in this case, *with*) is prescriptively ungrammatical. But now consider this sentence:

I eat bacon and eggs and ketchup.

When we try to form a question we get the following:

*What do you eat bacon and eggs and?

No English speaker would utter this sentence (hence the *), but why not? The source sentences look exactly the same; the only difference is that *ketchup* follows *with* in the first, and *and* in the second. It turns out that *with*, a preposition, functions quite differently from *and*, a conjunction, and the distinction between the two is part of our unconscious knowledge of English. Studying this unconscious knowledge, revealed in puzzles like this one, allows us to construct a model, or theory of descriptive grammar, a model that attempts to explain why we quite naturally produce grammatical sentences such as *What did you eat your bacon and eggs with?* but not ungrammatical ones like *What did you eat your bacon and eggs and?*

One final example. Consider the following sentence.

The cat chased the rat.

You can rearrange the words in this sentence in the following way:

The rat was chased by the cat.

The first sentence is in *active voice* and the second in *passive voice*, terms you may or may not be familiar with. In school, you are often taught to “Avoid passive voice” in your writing. Interestingly, many students we interview are aware of this rule but are unclear on what a passive sentence is (and hence unclear on what they’re supposed to avoid). Regardless of whether or not you are familiar with these terms, all native speakers of English know how to make an active sentence passive. What, for example, is the passive of the following sentence?

A Kenyan won the gold medal.

You may have come up with:

The gold medal was won by a Kenyan.

This example tells us once again that as a speaker of English, you know how words can be rearranged to create grammatical English sentences, such as questions (*Who did you talk to? What do you eat bacon and eggs with?*) and passive sentences (*The gold medal was won by a Kenyan*).

The two kinds of grammar we’ve outlined here, prescriptive and descriptive grammar, are based on different assumptions about language. The idea that we can discover the underlying principles and rules of natural language by studying it scientifically, the same way we study other natural phenomena, such as the solar system or photosynthesis, did not emerge in the way we know it now until the 1950s. Prescriptive English grammar, on the other hand, appeared as early as the fourteenth century. Below, we briefly discuss the origins of this prescriptive approach and the thinking of the time about language and grammar. We then sketch the historical shift in this thinking, and the different questions scholars

began to ask about grammar, questions which shape the scientific study of grammar as we know it today.

Origins of Prescriptive Grammar

Where did prescriptive grammar come from? Where did the idea of “Standard” English come from? Both ideas have their origins (as they do in many other countries that have proposed a “standard” language) in the belief that language variation can lead to misunderstanding. Such concerns about English emerge as early as the fourteenth century.

Al the longage of the Northumres and speicialliche at York is so sharp slittyng and frontynge and vnshape, that we southern men may that longage vnnethe [= hardly] vnderstonde. (John de Trevisa, 1385)

Oure language is also so dyuerse in it selfe that the comen maner of spekyng in Englysshe of some contre can skante [= scarcely] be vnderstondid in som other contre of the same lond. (Lydgate, 1530)

Dialects spoken in the North and West of England were stigmatized during this time, and Southern varieties of English, spoken in and around London by the upper classes, were perceived more favorably. In *The Arte of English Poesie* (1589) George Puttenham proposes that respected men should not “follow the speech of a craftes man or carter, or other of the inferior sort, though he be inhabitant or bred in the best towne ... for such persons doe abuse good speeches by strange accents or ill shapen soundes, and false ortographie.”

We see these language attitudes reflected in literature as well. Chaucer often used different Middle English dialects to express certain (usually comic) aspects of character; a speaker of a stigmatized Northern dialect, for example, may end up hoodwinking the gentleman with the more prestigious Southern speech. Shakespeare, writing during the sixteenth century, also often used dialect to express different favorable or unfavorable aspects of character.

Other factors led to Southern dialects becoming more highly valued. One of the earliest factors that set the process of standardizing English in motion was the printing press, brought to England in 1476 by the merchant William Caxton. Caxton set up shop in London, the center of commerce and education at the time, and printed far more books and distributed them far more widely than ever before. For practical reasons Caxton printed books in the East Midland dialect, the dialect (or collection of dialects) of London’s rising middle and upper classes, and the East Midland dialect became considered the “standard” dialect of English.

Latin, the language of the Christian church, was the language of scholarship in medieval England. As English inevitably began to compete with Latin as the language of commerce, literature, and scholarship, English was found sorely wanting, and was considered corrupt. Between the fifteenth and the eighteenth centuries scholars set out to “fix” and “improve” English, introducing spelling reforms, borrowing many Latin words into English, and attempting to codify its grammatical rules. Dictionaries also played a part in this process of standardization. Perhaps the most famous example is Samuel Johnson’s *A Dictionary of the English Language*, completed in

1755. Although Johnson himself was aware of the futility of trying to fix meanings of words of a living language, his dictionary was nevertheless taken as authoritative, and others followed. In 1828 Noah Webster published *Webster's American Dictionary of the English Language*, and the *Oxford English Dictionary* first appeared in 1884 and continues to be the foremost authority on the English language today.

English grammarians attempted to establish a language academy, like those in France and Italy, which would codify and enforce this “improved” version of English. Scholars in the eighteenth century, which was often referred to as the Age of Reason, strove to find order and harmony in the natural (and divine, with Latin as the model of a perfect, divine language), and some extended this idea to grammar as well. Grammarians took it upon themselves to improve English by establishing the rules of English grammar, and attempting to enforce them to prevent future change. John Dryden supported an academy, as did Daniel Defoe (author of *Robinson Crusoe*), and Jonathan Swift, author of *Gulliver's Travels*. Dryden's *Defence of the Epilogue*, written in 1672, criticizes supposed grammatical errors, stating (quite unapologetically), “From [Ben] Jonsons time to ours, it [English] has been in a continual declination.” By the publication of Samuel Johnson's dictionary in 1755, the idea for an academy had died. (The idea for an English academy became fodder for political battles between Whigs and Tories, and was criticized by others who thought an academy was too authoritarian. John Adams' proposal for an American academy met a similar fate.)

During this period, the idea arose that using the correct form of English was essential for social success. How-to books on English grammar began to appear, and to be used in schools. Here is a quote from the preface to Joseph Aickin's *The English Grammar* (1693): “My Child: your Parents have desired me, to teach you the English-Tongue. For though you can speak English already; yet you are not an English Scholar, till you can read, write, and speak English truly.”

Although people were certainly aware of language change and variation, people also believed that in order to be socially accepted and admired, one had to adopt the linguistic practices of those who were accepted and admired. Thus emerged the “grammar anxiety” we still see today and which has its source in two central ideas: that we must speak and write correctly for social acceptance and advancement, and that language, or more specifically grammatical change and variation, can be overcome and controlled. Moreover, what came to be considered “Standard” English was not a specific dialect, but rather whatever language was associated with speakers with social prestige (the literate middle and upper classes in Southern England) at the time.

Although the idea of a standard, correct form of English continues to be widely accepted today, what is considered standard actually varies from speech community to speech community, and from the local to the national to the international level. Many of us have different ideas about what is considered Standard English (and we each have our own pet peeves), and teachers and others who are considered language authorities don't always agree on what is considered standard, either. Today, with English spoken around the world, what speakers in Birmingham, Alabama consider standard is not the same as what speakers in Bangor, Maine do, and what is considered Standard English in New Zealand is different from what is considered Standard English in Australia, the United Kingdom, or in India.

What is considered Standard English not only varies from place to place but changes over time. To take an obvious example, what was considered Standard English in eighteenth-century England is hardly recognizable to us today. Linguist John

McWhorter (2012) offers examples of expressions from the nineteenth century that speakers considered “mistakes unworthy of polite company.” But these expressions seem just fine to us today. You were to say *the two first people*, not *the first two people*; *a well-lighted street*, not *well-lit*; and *the house is building*, not *the house is being built*. And although many took Johnson’s dictionary as a definitive authority on English of the day, many modern dictionaries and grammar guides embrace language change (though many still do not). The *Oxford English Dictionary* is constantly adding new words and documenting changes in meaning of existing words.

Indeed, there is little consensus on exactly what Standard English is, and we will certainly not try to define it here. (We offer you the opportunity to explore some of the proposed definitions and descriptions of Standard English in the Exercises.) What we do know is what Standard English is *not*, namely it is not a single fixed and uniform variety of natural language. We also know that the labels “standard” and “non-standard” are based on social rather than linguistic criteria, and that we stigmatize the speech of groups we stigmatize, and value the speech of groups we accept and respect, just as people did centuries ago in England.

We return now to a more in depth investigation of *descriptive* grammar, which, unlike prescriptive grammar, is not based on rules we consciously learn in school or from studying grammar books, but rather on the unconscious rules we use to produce and understand language.

The Components of Grammar

As we mentioned above, our knowledge of grammar includes knowledge of how to arrange words in sentences in patterns that we recognize as English. In other words, you know the rules of English *syntax*. But there is much more to syntax than word order, and syntax also interacts with other components of our linguistic system, as we’ll see below.

Syntax

One of the things you may have encountered in school are “parts of speech,” the different categories that words fall into, such as Noun, Verb, or Adjective. You might have learned that “a noun is a person, place, or thing,” and “a verb is an action or a state.” But these definitions don’t capture what we actually know about syntactic categories or parts of speech (nor do they provide us with tools of analysis to study language in more depth, as we discuss in a later section). To illustrate, consider the following nonsense sentence:

The flonkish warziles bloked six yerkons.

Are there any nouns or verbs in this sentence? If so, what are they? You may have identified *warziles* and *yerkons* as nouns, even though you don’t know what these words mean (and whether each is a “person, place, or thing”). You may also have identified *bloked* as the verb, again, even though you don’t know whether it is an action or state. How did you do that? Though you may never have (consciously) learned what nouns and verbs are, as a speaker of a language you already know about syntactic categories

Table 1.1 Syntactic categories.

<i>Lexical Categories</i>	
Noun	eagle, friendship, mud, platypus, blog, fortune
Verb	encourage, forget, irritate, feel, canter, seem, text
Adjective	happy, malevolent, lovely, angry, tiny, eager
Adverb	quickly, lovingly, fast, still, now, soon
<i>Functional Categories</i>	
Determiner	the, a, this, that, these, those, his, my
Numeral	one, five, ten, second, eighth
Quantifier	all, each, every, both, some
Pronoun	they, he, she, her, theirs, mine, yours
Preposition	without, in, on, over, behind, above, around
Conjunction	and, or, yet, for, but, so, nor
Degree word	very, so, quite, rather, too
Auxiliary verb	have, be, do
Modal	may, might, can, could, will, would, shall, should, must

and how to recognize them, even though you may not know the terminology, or *meta-language*, we use to talk about them.

You know, for example, that *warziles* is a noun because of its (syntactic) position after *flonkish*, a word you may have analyzed as an adjective modifying *warziles*, and after *the*, a word that introduces nouns. You probably analyzed *blorked* as a verb because it follows the subject *the flonkish warziles*, and precedes the object, *six yerkons*. *Yerkons* itself is a noun, because it follows *six*, a word that precedes nouns, and also because *six yerkons* follows the verb, a position in which we often find nouns (or more specifically *noun phrases*, but more on that later).

You may have noticed that *the* and *six* in the sentence above are actual English words, and they provide important clues to the categories of the words that follow them (nouns). These words express grammatical information (here, of number and in the case of *the*, definiteness), and differ from words that express lexical information, such as nouns and verbs. In other words, we know that certain *syntactic categories* are *functional*, and others are *lexical*. Lexical categories (Noun, Verb, Adjective, and Adverb) express the main content, or meaning in a sentence. Functional categories (Pronoun, Determiner, Numeral, Conjunction, Auxiliary, and others) express grammatical information about definiteness, number, tense, gender, etc. (see Table 1.1). We will discuss the distinctions between lexical and functional categories in detail in the coming chapters.

Returning to our nonsense sentence, if we asked you to divide the sentence up into its two main parts, what would you do? You would probably do this in the following way:

The flonkish warziles / blorked six yerkons.

This suggests that you have intuitive knowledge of how words are grouped together in a sentence. We call those groups of words “phrases,” and the words that make them up are “constituents” of that phrase. What is the syntactic category (Noun, Verb, Adjective, etc.) of each of these phrases? The first phrase is a *noun phrase* because its main word, or *head*, is the noun *warziles*. The constituents of this noun phrase are *the*,

flonkish, and *warziles*. The other phrase is a *verb phrase*, whose head is *blorked*, a verb, and whose other constituent is *six yerkons*.

[The flonkish warziles] [blorked six yerkons].
 NP VP

You may have labeled the noun phrase (NP) and verb phrase (VP) above as the subject and the predicate, respectively. Subject and predicate are two possible grammatical functions of phrases.

[The flonkish warziles] [blorked six yerkons].
 NP subject VP predicate

You can even divide the verb phrase up into two components, the verb *blorked* and its object, *six yerkons*. The phrases that follow verbs to complete their meaning are called *complements*, another possible grammatical function of phrases (in addition to *subject* and *predicate*).

[The flonkish warziles] [blorked [six yerkons]].
 NP VP complement

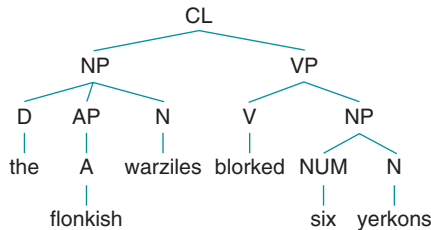
And just for the record, you also know how *not* to divide sentences in two; you would never do the following, for example.

*The flonkish / warziles blorked six yerkons.

Nor this:

*The flonkish warziles blorked six / yerkons.

That we can divide sentences up into parts that contain other parts tells us that sentence structure is not simply flat, made up of a linear strings of words, but *hierarchical*, with groups of words (phrases) that include other groups of words. Throughout the book we will use tree diagrams (also called *phrase structure trees*) as a convenient way to illustrate hierarchical structure. Here we diagram our nonsense sentence as an example.



As this tree diagram shows, the largest syntactic unit, the clause (CL), includes, or *dominates*, the subject noun phrase, or NP, and the predicate verb phrase, or VP. Each of these phrases in turn dominates other constituents.

In this brief analysis of a nonsense sentence we've discovered that our knowledge of syntax includes knowledge of syntactic categories (and the difference between lexical categories and functional ones), phrases, heads, constituents, and grammatical

functions (subject, predicate, modifier, complement). We have also discovered that phrase structure, which we can represent graphically in tree diagrams, is not flat but hierarchical. We therefore know much more about grammar than “a noun is a person, place, or thing” or that “a verb is an action or a state.”

Morphology

You probably relied not just on your knowledge of syntax to identify the nouns and verbs; you probably also used your knowledge of word structure, or *morphology*. Both *warziles* and *yerkons* end in plural *-s*, and *blorked* ends in *-ed*, a suffix we find on verbs, but not nouns. The adjective *flonkish* ends in *-ish*, an ending we find on other adjectives such as *pinkish* or *childish*. Suffixation and prefixation is one way we build words, and something we discuss in more detail in the following section. We then turn to other ways we form words, and how we divide words into different morphological classes.

Parts of words are called *morphemes*. There are different kinds of morphemes, and to illustrate, take the word *resealable*. You know that this word is made up of three meaningful parts: a prefix *re-*, the main word *seal*, and the suffix *-able*. Prefixes and suffixes are affixes; morphemes that attach to words or roots of words (and some languages have *infixes*, affixes that occur within words, or *circumfixes*, affixes that attach to the beginning and to the end of a word). There are two types of *affixation*, *inflectional* affixation and *derivational* affixation.

The morphemes *re-* and *-able* are derivational affixes because adding them derives a new word or dictionary entry (*reseal* and *sealable*, as well as *resealable*, are all derived from the root *seal* by derivational affixation, and each has its own dictionary entry). Below we give some examples of common English derivational affixes, and the words they derive (Table 1.2).

Inflectional affixes, on the other hand, don’t create new words, but attach to existing words, adding grammatical information. For example, the plural *-s* that we add to many words is an inflectional affix (rat → rats), as is the *-er* that attaches to most

Table 1.2 Some English derivational affixes.

Nouns	-ity	serenity
	-ment	excitement
	-ion	transmission
	ex-	ex-president
Verbs	-ize	realize
	-ate	activate
	-ify	mystify
	en-	engage
Adjectives	dis-	disengage
	-ly	lovely
	-ish	boyish
	-ful	bashful
Adverbs	non-	noncompliant
	-ly	usually, quickly
	-wise	crosswise
	-like	crablike

Table 1.3 English inflectional affixes.

Nouns	possessive - s Su's book	plural - s six books		
Verbs	3rd sing. - s Su walks	past tense - ed Su walked	pres. participle - ing Su is walking	past participle - ed/en Su has walked Su has eaten
Adjectives	comparative - er Su is taller	superlative - est Su is tallest		

adjectives (cold → colder). (Note that only *rat* and *cold*, but not *rats* and *colder* have dictionary entries.)

Here is the complete list of inflectional affixes in English (Table 1.3). As you can see, although there are many English derivational affixes, English has far fewer inflectional affixes – eight, to be exact!

Languages vary in how many inflectional affixes they have, and some have none at all (and express inflectional information in other ways). Maybe you have studied a language like Latin or Russian, both of which have far more complex inflectional affixation than English. German, French, and Spanish have more inflectional affixes than English does, and Old English had far more inflectional affixes than the language does today.

For example, in English, the verb *to walk* takes no inflectional affixes at all in the present tense, except in the third person singular, the affix *-s*.

singular: I walk, you walk, he/she/it walks

plural: we walk, you walk, they walk

But in French, almost every form of the verb *marcher* “to walk” has a different inflectional affix in the present tense (though some of them are pronounced the same). Inflectional affixes in this language express not only tense, but person and number as well.

singular: je marche, tu marches, il/elle marche

plural: nous marchons, vous marchez, ils/elles marchent

Languages that morphologically express a great deal of grammatical information (like French, Latin, and Navajo) are called *synthetic*, while those with few inflectional affixes (like English), or none at all (like Japanese or Vietnamese), are called *analytic*. Most languages, including English, employ some features of both and can be best understood as being somewhere on a continuum of analytic to synthetic.

As we saw above, we can form new words through derivational affixation, deriving, for example, *blogger* by affixing the verb *blog* with *-er* to create a (new) noun. This is not the only way we create new words however. Below is a list of other word formation rules we use all the time (Table 1.4).

As you can probably see from the list in Table 1.4, we add new words to *lexical* categories (such as nouns, verbs, or adjectives) but not to *functional* categories. (We don't make up new determiners, pronouns, or conjunctions.) Lexical categories are therefore *open class* categories, accepting new members, but functional categories are closed class categories, and typically do not accept new members.

Table 1.4 Word formation rules.

Term	Formation method	Sample words
Coining	inventing words not related to other words	bling, quiz
Compounding	two or more words behaving as one word	backlash, bailout, Facebook, undertake, voiceover
Blending	telescoping two words together	webinar, brunch, spork, crunk
Clipping	shortening words by omitting syllables	demo, lab, mum
Conversion	assigning one word more than one syntactic category	father, tweet, email
Acronyms	words from abbreviations	ACLU, MOMA, laser, radar
Eponyms	words from names, often brand names	jello, kleenex, Martha moment

Semantics

Above, we mentioned that in school you often learn meaning-based definitions of parts of speech, such as “a noun is a person, place or thing.” We’ve also shown you that you actually rely largely on syntactic and morphological evidence, rather than meaning, to identify syntactic categories. This is not to say, however, that our grammatical knowledge does not also include rules by which we construct and understand the meanings of words and sentences – it most certainly does. Here, we briefly explore our knowledge of meaning, or *semantics*, introducing some concepts we will return to later on. To begin, consider the following (rather famous) sentence attributed to Noam Chomsky:

Colorless green ideas sleep furiously.

You probably recognize that this sentence is syntactically and morphologically grammatical (the words are all English words, arranged in English word order), but the sentence is still *anomalous* or nonsensical; ideas can’t (literally) be green, nor can ideas sleep, much less furiously – you get the point. That we can recognize what is grammatical about this sentence (its syntax and its morphology) and ungrammatical (meaning) tells us (a) that our grammatical knowledge includes knowledge of how to construct meaning from words and sentences and (b) that the component of grammar that governs meaning is in certain ways separate from other components of grammar. So, just as one can study syntax and morphology as separate (but interacting) components of grammar, one can also study semantics as a separate component of our knowledge of grammar, one which overlaps with syntax and morphology.

Though we’ve seen that semantic definitions of syntactic categories aren’t explanatory, syntactic categories do have semantic properties that we will investigate in later chapters. What, for example, is the difference between the following two nouns *furniture* and *couch*?

The furniture is really expensive.
The couch is really expensive.

You may say that to be a couch is also to be a piece of furniture, so *couch* entails, or includes, the meaning of *furniture*. You may also have noticed that in English only *couch*, but not *furniture*, can be pluralized:

*The furnitures are really expensive.
The couches are really expensive.

This is because *furniture* in English is a *mass* noun, while *couch* is a *count* noun. (We'll see that, although languages share the distinction mass and count, they differ in terms of nouns that fall into each semantic class. For example, *furniture* in French is *les meubles*, a count noun). Mass and count are just two possible semantic features of nouns which we will explore in the coming chapters.

Adjectives also fall into different semantic classes, which we can illustrate here with a very simple example. We say:

small green chair

But not:

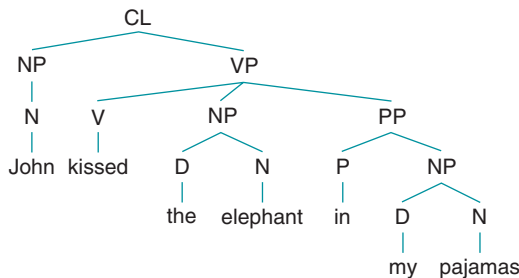
*green small chair

Why? It turns out that semantic classes of adjectives (size, color, nationality, shape, age, etc.) occur in a certain order, and that color adjectives must not precede size adjectives (in English, but not necessarily in other languages).

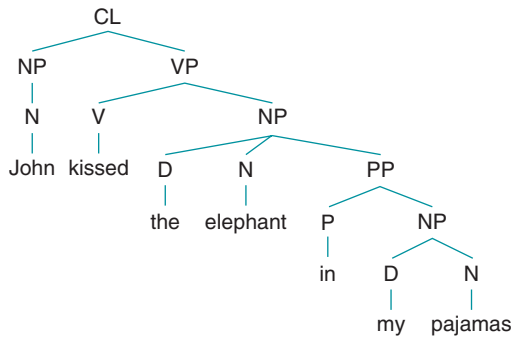
Another semantic property we will discuss is *ambiguity*, which arises when words or sentences have more than one meaning. Consider this example:

John kissed the elephant in my pajamas.

Assuming the literal meanings of each word in this sentence, what are the two meanings? Who is in my pajamas? John or the elephant? It turns out that this sentence is ambiguous because it has two different structures, one in which the phrase *in my pajamas* modifies the verb, and the other in which it modifies the noun *elephant*. This is where tree diagrams come in handy; we can illustrate these two meanings with two different tree diagrams. In the first diagram below, the prepositional phrase (PP) *in my pajamas* modifies the verb, *kissed*, and is a constituent of the verb phrase, or VP.



In this next diagram, however, the PP *in my pajamas* is part of the noun phrase (NP), and modifies the noun *elephant*.



These diagrams illustrate *syntactic ambiguity*, that a sentence can be ambiguous because of its syntactic structure. Another kind of ambiguity is *lexical ambiguity*, or ambiguity based on a word with more than one meaning. Here's an example:

I grabbed the bat.

Here, the noun *bat* is ambiguous – it can mean “a nocturnal mammal with wings” or “a piece of sports equipment.” Ambiguity in this case derives from the multiple meanings of a single word, and can't be explained in structural terms (there is only one tree diagram for this sentence, where *bat* is a noun). We return to ambiguity later in the book.

One final aspect of semantics that we will introduce here, and which interacts quite closely with syntax, is *thematic roles*. Verbs seem to have some say in the kinds of subjects and complements they occur with. For example, the verb *kiss* seems to require a *kisser* and *kissee*.

Lee kissed Cary.

The verb *kiss* is therefore different from *laugh*, which requires someone to do the laughing, but not a *laughee*. The verb *kiss*, on the other hand, can't occur without a complement.

Lee laughed.

*Lee laughed Cary.

*Lee kissed.

To put this a bit more technically, verbs select what we call *arguments*, to which they assign certain semantic roles, or thematic roles. The verb *kiss* selects a *kisser*, a phrase with the thematic role of *agent*, or “initiator of the action.” *Kiss* also selects another phrase, the *kissee*, an *experiencer*, “entity which is aware of the action or state described by the verb, but which is not in control of that action or state.” *Laugh*, on the other hand, selects only one argument, a subject that is an agent.

Thematic roles allow us to explain some interesting semantic differences among sentences with the exact same syntax. Consider the difference between the following two sentences.

The girl climbed the wall.

The ivy climbed the wall.

The word order in both sentences is the same, and *the wall* is the thing being climbed in both. But the subject, or the climber here, is semantically different in each. Although *the boy* is probably climbing the wall consciously, under his own volition, we can't attribute such volition to *the ivy*. This suggests that these two different subjects of *climb* have different thematic roles: *the boy* is an agent (consciously climbing of his own volition) and *the ivy* is a *patient*, "entity undergoing the effect of some action or change of state" (not dependent on volition). You may have learned in school that the subject is "the doer of the action," or, in other words, an *agent*. But these sentences illustrate that not all subjects are agents. Here's another example:

Taylor broke the vase.
The vase broke.

Taylor is the subject of the first sentence, and *the vase* is the subject of the second, but only in the first sentence is the subject also an agent, or "initiator of the action." The vase, on the other hand, undergoes breaking, and is thus a patient in both sentences. So, subjects can be agents or patients, and we'll find, as we explore thematic roles in later chapters, that they have other roles as well, and sometimes no thematic role at all!

Phonetics and phonology

Another essential component of grammar, one which we've said virtually nothing about so far, is *phonetics*, the inventory of sounds in our language, and *phonology*, the system of rules we use to combine those sounds, or phonemes, together to form syllables, words, and larger units.

Different phonetic inventories and phonological systems give rise to different *accents*, or pronunciations. A single language can be spoken with different accents; speakers of Scots English, for example, sound very different from speakers of Jamaican English. We tend to attach different social values to different accents; we tend to think of certain accents as more acceptable or more "standard" than others. In the United States many of us value Northern or Midwestern accents more highly than southern American English accents, and think of British English accents as more "standard" than Australian or East Indian English accents. Yet all accents are governed by systematic rules, and no accent, in linguistic terms, is better than another.

To explore accents a bit further, consider dialects that "drop *r*" such as varieties of English spoken in the United Kingdom, the southern United States, and New England. Speakers of these "*r*-less" dialects don't drop *r* just anywhere, they do so only under certain phonological conditions. For example, speakers drop *r* in a word when it follows a vowel, and would therefore not pronounce the *r* in the following words:

heart, car, farm

But they would pronounce *r* in these words, because *r* does not follow a vowel:

red, brick, scratch

The *r*-rule in words is even more complex; though you may be familiar with the phrase "pahk the cah in Hahvad Yahd," a stock phrase used to imitate this dialectal feature, real

speakers of such varieties of English in fact retain a final *r* when the following word begins with a vowel. Speakers say “pahk the car in Hahvad Yahd.” (A similar rule accounts for so-called *r-intrusion*, where some speakers add *r* to words that end in vowels before another word that begins with a vowel, as in *Mahther is coming* or *That idear is a good one*.) This brief discussion of rules governing *r* illustrates speakers’ unconscious knowledge of a phonological rule, one that interacts with syntax.

Phonetics and phonology interact with other components of grammar as well. Adding a suffix to a word, for example, can change its pronunciation. We pronounce the final syllable of *serene* to rhyme with *keen*, but we change this pronunciation when we affix *serene* with *-ity*, deriving *serenity* (and this same rule applies to other words, such as *divine/divinity*, *profane/profanity* and in other pairs such as *school/scholarly* and *provoke/provocative*). When we add the plural affix *-s* to words, its pronunciation can change as well. We add *-s* to *cats* and *desks*, but what about *dogs* and *cans*? In these words, *-s* is pronounced *z* because of a phonological rule (called *voicing assimilation*).

We conclude this section with another example of how phonology interacts with syntax. Consider the following examples, which illustrate how we change our pronunciation of sequences of words such as *I am* to *I’m*, and *going to* to *gonna*. This process is called phonological *contraction*.

I am going to go to the party.
I’m gonna go to the party.

Interestingly, contraction is not always possible even though it might appear that it should be. We can contract *I* and *am* in the sentence above, but not here:

You are going to go to the party and *I am* too.
*You are going to go to the party and *I’m* too.

And we can contract *going to* above to *gonna*, but not here:

I am going to the store.
*I am gonna the store.

Why is contraction not possible in these examples? It turns out that when we study more contraction data we find that there are systematic syntactic and phonological rules that govern this process, and even predict where contraction will be grammatical and where it is impossible. This brief contraction “puzzle” therefore provides us with another good example of the difference between rules of natural language and prescriptive rules we learn in school, and what we learn by studying each. You may have been taught to avoid contractions in your writing, or even that “*gonna* is not a word.” But these prescriptions tell us nothing about how contraction actually works, and more importantly, they don’t provide us with the tools to understand why we say the things we do.

The Scientific Study of Language

As we discussed in this chapter, we can study language scientifically, just like we study the circulatory system or the solar system, by examining data (such as the puzzles we

have touched on above), constructing hypotheses that attempt to explain and describe these data, and testing those hypotheses against additional data. In so doing, we (ultimately) construct a model of how language (or the solar system or the circulatory system) works. This approach to language is rather new (in terms of scientific theories), and became prominent in the 1950s when linguist Noam Chomsky revolutionized the study of language by posing the question we paraphrase here as “what does it mean to know a language?” That is, what does a speaker or signer have to know in order to produce and understand his or her native language? Chomsky’s research and questions gave rise to modern linguistics, and research in linguistics has greatly advanced our understanding of the principles and operations common to all languages, despite how different they may seem.

Although the idea of a standard, fixed, and correct form of English might have been compatible with what scholars knew about language in the eighteenth century, it is incompatible with what we now know about grammar and how language actually works. Our goal here is to provide you with tools to analyze the grammar of the language you speak, tools which provide a foundation for you to study language in any way you choose, and to make your own informed decisions and choices about it. What we explore in the coming chapters will deepen your understanding of this uniquely human behavior, and, we hope, encourage you to continue to explore it both in and beyond the classroom.

Exercises

1. Language change

Look up (in a good dictionary – we recommend the *Oxford English Dictionary*) four words that you might consider slang or taboo. Discuss how the meanings of these words have changed over time. Are you aware of the origins of these words? What does this mean about language change?

2. Global English

Where is English spoken today around the world? Do some research on two or three different varieties of English spoken outside the United States and United Kingdom. When, why, and how did English come to be spoken in the countries you investigate? How many speakers are there, and what other languages are spoken?

3. American dialects

Look up three American English dialects and discuss their origins and some of their linguistic features. Can you identify your own dialect of American English? Which is it?

4. Pet peeves

Give at least two of your “pet peeves” of grammar, word usage, or pronunciation. For example, “It really bugs me when someone says ‘nukeyuler’ for nuclear” or “I think it sounds really weird when someone says, ‘This car needs washed.’” Where do you

think your feelings about such variations in pronunciation or grammar come from? Briefly discuss.

5. “Error” correction

What aspects of your language have you been corrected on? Do you recall consciously making a change in pronunciation, word usage, or grammar after being corrected? Do you now correct others for the same “errors?” Did it bother you to be corrected, and who are the language authorities in your life (has anyone ever corrected you on Facebook)? If you can’t come up with any spoken language errors, you may consider some examples from the written language.

6. Syntactic intuitions

Here are some sentences for you to analyze, and some suggestions below of things to find.

- (a) The grey kitten unrolled a ball of yarn.
- (b) Lawrence seems annoyed with the decision.
- (c) There were seven ducklings in the pond.

See if you can:

- divide each sentence into two main parts or phrases (subject and predicate)
- divide each of those two parts into phrases
- further divide the sentence into phrases
- identify the head of each phrase
- label the syntactic category of each phrase
- explain how your analysis illustrates hierarchical structure

Discuss your analyses with your classmates and try to resolve any questions or disagreements about the data.

7. New words

Each year, the professional organization, the American Dialect Society, nominates a Word of the Year, “A word or phrase which best characterizes the year ... reflects the ideas, events, and themes which have occupied the English-speaking world, especially North America.” Peruse some of the recent winners and nominees at ADS’s website and try to determine what syntactic category, or part of speech, each is. Are they all open class words? Are they derived from affixation? Word formation rules?

8. Accents and stereotypes

We briefly discussed how we attach social values to different dialects and accents. These social values are reflected in the media, particularly on television, in the movies, and on YouTube. Find at least two examples of how dialect and/or accent

is used to express some aspect of character (Disney movies are a great resource, as are *South Park*, *The Simpsons*, or *Family Guy*.) How do accents influence our perceptions of a particular character?

9. Standard English

Though many of us are familiar with the term Standard English, upon close inspection, it is actually quite difficult to define. Look up at least three different definitions of Standard English (in dictionaries or in other resources – grammar and writing guides may include definitions, as might other education resources). How are they the same and/or different and what do they tell us about what the term Standard English means?

Note

- 1 We assume here for simplicity that readers are native speakers of English, and our focus here is on oral language, though what we say here about grammar, as a linguistic system, applies to any language, signed or oral. All language users have intuitive knowledge of language, and all languages can be studied scientifically in the way we discuss here.

References

- Comrie, B. (1998) Language, in *MSN Encarta Encyclopedia*.
- Ethnologue* (2005) Statistical summary, http://www.ethnologue.com/ethno_docs/distribution.asp?by=size#2, accessed March 5, 2013.
- McWhorter, J. (2012) A matter of fashion. *New York Times*, July 9.
- Sobin, N. (1999) Prestige English is not a natural language, in Wheeler, R.S. (ed.) *Language Alive in the Classroom*, Westport, CT: Praeger, pp. 23–36.
- Weber, G. (1997) Top languages: The world's 10 most influential languages. *Language Today*, 2, December.