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# Collaborative Textbook on English Syntax (Version 1.0)

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The Students of ENG 270 at York College / CUNY

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# COLLABORATIVE TEXTBOOK ON ENGLISH SYNTAX

## Version 1.0, June 2022

*Matt Garley; Karl Hagen; and The Students of ENG 270 at York College / CUNY*

The latest version of this book can always be found online at https://pressbooks.cuny.edu/
englishsyntax/

If it's not there, please write me at mgarley@york.cuny.edu and I'll give you the best
information I can about where to find it!

# Contents

# Introduction

## Pre-Preface

*Matt Garley*

This textbook began with the work of Karl Hagen, who published it under a Creative Commons license as "Navigating English Grammar" at his site Polysyllabic. As part of a project which started in Fall 2020, and is continuing as of Fall 2022, the textbook is intended to be read, annotated, and updated by ENG 270 courses at York College / CUNY, becoming a resource for future students, and ultimately becoming a textbook to be used by other students of the syntax of varieties of English.

Portions of Chapter 2, 8, 9, and 10 are adapted from assignments written by York students, who are credited according to their preference (by real name, pseudonym, or anonymous contribution). York students' annotations on hypothes.is have also contributed to rewrites for clarity, to correct errors, or to add more information where desired.

This edition is edited and maintained by Matt Garley–if you have questions, comments, suggestions, or plan to use

this in your course, please let me know at mgarley@york.cuny.edu!

# Preface

*Adapted by Matt Garley from Hagen, Karl. Navigating English Grammar. 2020.*

## What is this book about?

This textbook introduces a set of fundamental concepts that are necessary for a solid understanding of English grammar. Unlike many books, it doesn't just tell you how things are (or, worse, *should be*) in English. It also encourages you to consider a variety of Englishes, plural, and the sorts of rules we follow in these language varieties when we speak and write, without even thinking about them. By the end, you should, in principle, be able to analyze–break into components–most English sentences, not just the artificially constructed examples of grammar books. Just as importantly, you should have developed the skills to analyze other people's assertions about grammar critically.

The basic attitude towards language that this course promotes is that language is a phenomenon to be studied, not an ideal or goal to be reached. This textbook will help you use real-world evidence to think about language, basing your conclusions primarily on the way English actually works rather than on arbitrary assertions by so-called authorities who may or may not offer well-founded advice.

On the other hand, this book is tuned to the needs of

my primary intended audience: undergraduate students interested in journalism, classroom teaching, English, and a variety of other disciplines, and so my emphasis is on analysis of written English, and I devote particular attention to those grammatical features that come up frequently when commenting on student writing. It is meant to equip you with a set of technical tools that will better allow you to understand the varieties of English used by yourself and others.

## Why another grammar book?

*Karl Hagen:* This work began because I could not find a textbook that fit my needs for a particular course—a common problem for many instructors. The earliest versions were written for a college class titled *The Structure of Modern English*, designed to introduce future teachers to linguistics. Such courses are typical in teacher-training programs around the United States. In one semester, students receive a smattering of phonology, morphology, syntax, semantics, and other linguistic topics such as language acquisition or social attitudes towards language variation.

When I first began to teach this course, I followed the lead of the previous instructor and used an introductory linguistics textbook. It was a fine book, but it was designed for linguists, not K-12 teachers. It soon became obvious that large portions of this material were only marginally relevant to what these teachers would soon be doing in the classroom, and even where the material was applicable, its formal linguistic trappings made it hard for the students to see how they could use this knowledge in their own classrooms.

During the same period, I was also teaching writing and grammar to high school students in an after-school program, an experience that let me see first hand not only exactly what grammatical concepts high school students had actually retained from their regular school experience (usually not very much) but also how their teachers communicated grammatical ideas. I began to pay attention to the comments written in the margins of students' papers, comments that tried to explain the problems with the students' language but which did so in terms that were inaccurate or unhelpful. For example, they would flag as "passive voice" things that were not, in fact, passive.There were teachers who imposed draconian penalties based on surface features, such using more than two instances of *BE* in an essay. They would use generic annotations like *awk* or *choppy*, which indicated the teacher's disapproval without providing any precise indication of *why* the writer's wording was problematic.

To be clear, few of them were engaged in stereotypical grammar pedantry. Most weren't filling the margins of students papers with trivial corrections or prioritizing grammatical correctness over the expression of ideas. I could see that teachers were groping towards a language to talk about their students' writing. But when they did turn to grammar, as often as not they did so in ways that either had no effect—because the students didn't understand what the teacher meant—or were counter productive—because the students took away lessons that wound up making their writing worse.

Moreover, although they were under the impression they were using those concepts to enforce "standard" English and teach better writing, it was clear that they weren't all applying the same standard. They couldn't agree among

themselves about what was an error or why, or which errors were most significant. And I saw little evidence that any attention at all was paid to the ways that knowledge of grammar could help direct a student's attention to the rhetorically significant aspects of the writing process.

I find it hard to blame these teachers. (OK, the guy who gave Fs for using more than two instances of *BE* in an essay was the worst sort of pedant. Him I blame.) They had learned a theory of language imperfectly and unsystematically, without even realizing that it was a theory and not a simple statement of truths, and without any principled way to distinguish between well-founded claims and silly ones. And they had been taught implicitly to regard grammar as merely the surface polish of language rather than a productive way to create meaning.

These experiences caused me to drastically reshape my course. I realized that in one semester I could never cover all the grammatical concepts that in-service teachers would actually need when confronted with the obligation to correct papers, prepare students for standardized tests, or satisfy content standards that mandate the teaching of certain grammatical concepts. What I could do, however, was to put in place an analytic framework that would help them navigate the welter of conflicting claims about English and figure things out for themselves. I wanted to give my students the tools necessary to think just as critically about grammar as they would about a literary or historical text.

*Matt Garley*: I had been teaching ENG 270, Introduction to English Syntax and Grammar, for years at York College, and I had used a number of different books and combinations of books. As Karl says above, the common texts others used to teach this course were mainly

prescriptive, and those that took a descriptive approach, i.e., a linguistically sound one, were often written at a level that assumed a lot about a student's knowledge coming into the course, or were written with a great deal of jargon, or focused too much on this or that obscure feature of grammar that students would be unlikely to encounter or care about. I wanted a zero-cost, open-access text for this one-semester course that challenged students to think about English(es) and their grammars in a new way. Beginning in 2019, as part of several programs funded by CUNY grants to work on OER (Open Educational Resources) and ZTC (Zero-Cost Textbooks), and administered by the Center for Teaching, Learning, and Educational Technologies (CTLET) at York College, I began searching for a text to adopt and adapt for the course. Fortunately, I came across Karl Hagen's excellent but unfinished 'Navigating English Grammar', and as it was published under a Creative Commons license, I was able to copy, adapt, update, and re-release it for my ENG 270 courses.

I am very grateful to Karl for the great amount of work that went into the starting point for this text, and I'm hoping with this and future editions to take it to the next level, and make it a complete resource that can be used by other instructors and other institutions. In lieu of a proper 'Acknowledgments' section (perhaps in a later edition!) I would like to thank Katherine Tsan, Greet Van Belle, and Joshelyn Vivas for organizing and delivering the OER and ZTC workshops that have provided the organization and funding needed to re-work and re-imagine this text for the course, and finally and most importantly the ENG 270 students, who over the past few years have drafted sections of the textbook, provided comments on the chapters, asked

questions which caused me to pause and wonder what I *really* know about English, and who remain my main motivation for doing this work.

## What type of grammar is this?

This textbook attempts to introduce just as much theory as is necessary for a solid basic model of English grammar–one which helps a student conduct a reasonably accurate constituent analysis of authentic, unsimplified, written English without delving into so much detail that the analysis becomes overwhelming. The textbook minimizes topics or approaches that are specific to particular linguistic schools such as minimalism or construction grammar, and we've tried to minimize the number of theory-internal reasons for adopting a particular analysis.

This text is particularly indebted to Huddleston and Pullum's *The Cambridge Grammar of the English Language,* whose analysis I follow in many respects. This monumental work caused me to significantly rethink my own understanding and teaching of grammar. Where I have departed from the CGEL, I have often been motivated by making grammar accessible to students, rather than by direct disagreement with the authors' analysis. In some cases I've presented a simplified account early in the course and a more refined one later on. These units can safely be skipped if you're looking only for a serviceable basic account. I find the advanced units particularly useful for two purposes: first, they give you guidance in dealing with certain difficult questions that more advanced or curious students tend to bring up. Second, they provide additional training in how to evaluate and revise our prior theories

when we're confronted with evidence that complicates the story.

This textbook almost certainly contains some errors or inadequacies, but it is a living document; if you're a student in this course, bring it up, and let's see if we can't make it better!

(*Last updated 27 Jun 2022*)

# 1

# Chapter 1. Language, Grammar, and the Nature of Error

*Adapted and expanded by Matt Garley from Hagen, Karl. Navigating English Grammar. 2020.*

Children can learn any language they are exposed to. Take a moment to consider how remarkable that ability is. If an infant is raised in a society, that child will learn the language—or languages—they hear spoken. Ethnic origin makes no difference to this fluency. A child of Japanese parents raised by English speakers will grow up speaking fluent English. A child of European ancestry will learn to speak perfect Navajo if raised among Navajo speakers. No special training is necessary; by the time children reach school age, they have already mastered the basic structures and vocabulary of their native language, even if their parents give them no special instruction.

Adults, by contrast, lack this ability. Although a lucky

few can absorb new languages easily, most people require laborious study to learn a new language after childhood. Many immigrants, for example, live in their new country for years and never completely master the local language, even after making sustained efforts to study it. Pronunciation in particular can be a continuing source of difficulty, even when the speaker is otherwise fluent. Celebrity actor and former California governor Arnold Schwarzenegger retains a distinctive Austrian accent to this day, and he immigrated to the United States at the age of 21, over half a century ago.

This contrast between children and adults suggests that there is something biological to language, that it is not just an arbitrary invention of human cultures. Children seem biologically primed to acquire a language as part of their development and lose this ability as they mature. What is this biological basis of language? Are there basic similarities among languages that make it easier for children to master them, or do languages vary without limit? What are the rules of a language, and how do people learn those rules? These are a few of the basic questions that the subject of linguistics tries to answer.

Linguistics is the study of the basic nature and structure of human language. It tries to explain the fundamentals of how language works. That focus means that linguistics attends to different aspects of language than do the other language arts with which you may be more familiar. For example, one reason people study languages is to learn how to communicate with other speakers of that language, as in the classes in Spanish, French, or other languages that most high-school students take. Linguists, of course, do need to study languages, but communication with others isn't typically their primary goal. A linguist trying to explain

some basic feature of language may examine hundreds of languages from all over the world—relying on descriptions of these languages by specialists—without being able to communicate in more than a handful of them.

Linguistics also distinguishes itself from the other language arts by its scientific approach. Like other sciences, linguistics constructs theories and tests the validity of these theories against empirical evidence. Linguists for the most part study how people actually use language, whether or not that use matches what schoolbooks claim is the "correct" form of the language. Linguistics wants to explain things the way they actually are, not to change them according to some preconceived notion. Consider, for example, an utterance such as:

(1) Me and Sally ain't never been friends.

Traditional grammar books would dismiss this sentence as ungrammatical, telling you that *ain't* is not a word, that *me* mustn't be used in the subject of a sentence, and that you can't use two negatives together. Yet people utter this sort of sentence every day, and are easily understood, despite repeated and strenuous objections from teachers. An adequate description of English must explain this fact.

## Descriptivism vs. Prescriptivism

Linguistics takes a **descriptive** approach to language: it tries to explain things as they actually are, not as we wish them to be. When we study language descriptively, we try to find the unconscious rules that people follow when they say things like sentence (1). On the other hand, the schoolbook approach to language is typically **prescriptive**. It tries to tell you how you *should* speak and write.

While linguists argue first and foremost for a descriptive

approach, there is an argument to be made that there is a place for both description and prescription in language study. For example, when adults learn a foreign language, they typically want someone to tell them how to speak, or in other words, to prescribe a particular set of rules to follow, and expect a teacher or book to set forth those rules. But how do teachers know what rules to prescribe? At some point in time, someone had to describe the language and infer those rules. Prescription, in other words, can only occur after the language has been described, and reasonable prescription depends on adequate description.

In an ideal world, descriptive and prescriptive approaches to language would follow this harmonious relationship: linguists would describe the rules of a language, and pedagogues would use those descriptions to make textbooks to teach language learners. In the real world, however, practitioners of the two approaches often separate themselves into hostile camps. Prescriptivists accuse descriptivists of being anarchists who want to do away with all rules of language. Descriptivists accuse prescriptivists of uninformed bigotry. With each side posting guards at the ramparts to repel the enemy, both tend to ignore the work and concerns of the other. Grammar textbooks used in K-12 education often neglect the findings of linguistics and instead copy outdated, factually incorrect material from older textbooks. In particular, prescriptive approaches often fail to recognize the validity and diversity of a range of varieties of a language. For example, English textbooks often treat English as a sort of 'book in the sky' where the 'correct' or 'proper' rules are written, and all of the other varieties, dialects, and variations on English (what I'll call non-standardized Englishes) as mistaken, full of errors, or

worse. But these are just as much regular, rule-governed human languages as the varieties of English people think of as 'good'! If these varieties of English were recognized as the languages they are, it would go a long way towards remediating this conflict. For their part, linguists frequently treat *prescriptivism* as a bad word but fail (with some honorable exceptions) to show how their abstract theorizing is relevant to language teaching.

The conflicts between prescriptivism and descriptivism originate in a difference in focus: scientific study versus teaching. But that difference hardly explains why the two groups are so hostile. Other disciplines don't have a similar divide. High school physics teachers don't scorn the abstruse theorizing of university professors in quantum mechanics or string theory, even if those theories are far beyond the level of high school physics. They take it for granted that there is a continuity between the basic—and simplified—principles taught in introductory classes and the work that cutting-edge research scientists perform. Why is the study of language different?

One reason may be the emotional investment we all have in language. Language is more than a neutral medium for transmitting a message. It has washed over us like a river continually since birth. We use it constantly. It shapes who we are. Think back to your earliest memories. Can you ever remember a time when you were without language? Identity and language twine about each other so tightly that they are impossible to separate. Children of immigrant families, for example, often associate the language of their home with warmth and strong personal connections, with the deepest, private sense of who they are, in contrast to the formal public language of school and the outside world.

Language serves as a symbol of group identity. With the

words we use and the way we pronounce them, we send signals to others—conscious and unconscious—about where we come from and how we see ourselves. Children, and adults for that matter, will adopt slang terms to show that they are hip, part of the in crowd. Some people view English as the unifying force of America. According to this perspective, the major thread holding a diverse society together is language. Those who stress this point emphasize the need for immigrants to master English, and sometimes insist that English should be the only language used in public life in the United States.

You don't have to accept this conclusion yourself to see that the choice of language involves deep questions of who we are and how we envision our relationship with society at large. For that reason, pronouncements about language can provoke strong reactions. When someone tells us that the way we use or understand language is inadequate, it's only natural to bristle. A challenge to our language can be tantamount to a challenge to our inner selves. So when disagreements arise over how we use language, the emotional stakes are higher. Over the years, we have developed a strong intuitive sense of what language is (or what it should be), because language ideology surrounds us in our everyday lives. Most of us probably find ourselves much more detached from questions such as, "How did the universe begin?" or "What happens if you travel at the speed of light?" If our assumptions about physics are wrong, we don't take it personally.

## The Multiple Meanings of 'Grammar'

The consequences of these clashing assumptions are nowhere more stark than in the confusion over the term

*grammar*, which has various, somewhat conflicting meanings depending on who uses the term. Grammar, at its core, refers to the rules of language. But how these rules are imagined and what these rules encompass can vary greatly from definition to definition. As a result, the common understanding of grammar differs in subtle but important ways from the linguistic sense of the term.

The traditional understanding of grammar—the one we associate with the prescriptivist position—began in ancient Greece and Rome. For hundreds of years, grammar was synonymous with the study of Greek and Latin.[1] These languages were regarded as perfect—or nearly so—and their grammatical structures were taken to be universal forms by which all "vulgar" languages should be judged. It was not until the seventeenth century that writers began to turn their attention systematically to the grammar of English itself, and when they did so, they applied the structures that they had learned studying classical languages to English.

English, of course, differs greatly from Latin, and unlike the Romance languages, is not a direct descendant of Latin. Therefore, the grammatical categories developed to describe Latin did not always fit perfectly with English. How the early English grammarians reacted to these difficulties depended on the individual inclination and aptitude of the writers, but most tended to assume that when the two languages differed, it was English that was corrupt and in need of reform.

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1.  The earliest grammarians were Greek, and Latin grammars were first developed in antiquity following Greek models. But in Western Europe, from the Middle Ages through the Renaissance, practically all educated people understood Latin but very few knew any Greek. Latin, therefore, had a much greater influence than Greek in the development of English grammatical teaching.

The grammarians who shaped traditional English grammar were largely amateurs, people of no particular training, qualified chiefly by their interest in the subject. Some had a strong intuitive understanding of their subject; others were little more than hacks. They bequeathed later generations a mixed heritage. On the one hand, linguists continue to use much of their terminology, although they have refined many details. On the other hand, the emphasis on the perfectibility of language encouraged a severity towards the day-to-day language of many people that can still be seen in many writing handbooks and in the way many people view language errors.

Traditional definitions of grammar do not vary much. Samuel Kirkham, author of one of the best-selling grammar books in nineteenth-century America, defines grammar as "the art of speaking and writing the English language with propriety"[2]

The first thing to notice is that grammar is seen as an art. In other words, the overriding goal of traditional grammar is to produce aesthetically pleasing English. Traditional grammars don't try to explain the most basic aspects of language—the point at which linguistics begins. It takes the basics for granted. Traditional grammar is not about speaking any old form of English, but one particular form—a 'proper' one.

Kirkham's word "propriety" suggests that grammar is a form of social decorum and therefore that grammar involves following rules. And so, as even cursory thought will show, language must. Without some agreement as to the rules, there could be no communication. But just what do we mean by a rule?

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2.   Samuel Kirkham, English Grammar in Familiar Lectures, 12th ed. 1829.

The rules in traditional grammar books comprise a list of dos and don'ts: make subjects agree with verbs, don't split infinitives, don't end a sentence with a preposition, and so on. Notably, many of these rules are regularly violated by native speakers (who, we shall see, are not without rules, but are simply following alternative rules). Traditional grammar books spend little time with rules such as "put adjectives before nouns." And they would never think to explain the ungrammaticality of a sentence like

(2) *The boss would like to may see you immediately.[3]

Native speakers never produce such structures, and so traditional grammar books ignore them. These lists of rules do not so much explain how a sentence of English is put together, as they pick out rules from non-standardized dialects to call 'errors'. As an unfortunate consequence of this approach, traditional rules form a semi-random collection of scattered bits of information, presented without system. And anyone who has ever tried to memorize lists of unconnected information knows how hard it is to retain all that trivia.

Linguists, like the writers of prescriptive grammar books, also assume that language is governed by rules. When linguists speak of grammatical rules, however, they generally mean something different. To a linguist, grammatical rules mean one of two things. First, grammar can signify the internal, largely unconscious system that we use to combine sounds into words and words into larger meaningful units. Native speakers learn most of this system intuitively, without explicit training, when they acquire the language as children. To learn a language this

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3. By convention an asterisk marks a sentence that is descriptively ungrammatical, that is, which native speakers intuitively judge to be unacceptable.

way involves a tacit knowledge *of* grammar distinct from knowledge *about* grammar. Knowledge about grammar implies an explicit understanding of these normally unconscious processes. This explicit knowledge is not a natural process and is the subject of this course. When people say "I don't know any grammar," what they really mean is that they lack conscious knowledge about grammar. Speakers of almost any variety of English would put *fast* before *car* in a sentence like "That's a fast car.", and would be extremely unlikely to say or write "That's a car fast." This is implicit or unconscious knowledge of rules. Only some English speakers could explain that *fast* here is an adjective, and *car* a noun, and that *fast* must precede *car* because adjectives come before the nouns they modify in English–this is explicit knowledge *about* grammar, and the sort of thing we'll be building in this course.

Because these rules are inside our minds, they are not directly accessible to study. We cannot peer inside someone's skull to observe words being combined into sentences. So in addition to grammar as an internal system, linguists also use the term grammatical rule to refer to a formal mechanism that tries to explain how language is generated. Sometimes these rules are even presented in the form of equations using a quasi-algebraic notation.

In many ways, these rules are similar to equations in other sciences, since they provide a formal description of something that happens. Also as in other sciences, these rules are hypotheses about the way language works. In other words, they make predictions about future actions that we can test. If the hypothesis doesn't match the observed results, it needs to be revised or abandoned. In a similar way, an equation of motion in physics lets us both

describe what we have already seen—the path of a flying arrow, for example—and predict the path that future arrows will take. Another perspective we could take is to see these systems of rules as *models*–that is, to consider English to be something like the Statue of Liberty, and the system of rules we learn in a course like this as something like a building-block model of the Statue of Liberty: not as detailed, not exact, but a reasonable representation of its major features that can be used to explain the real thing. This approach, that is, thinking of our rules of grammar as a model of language, rather than the language itself, has the benefit of reminding us that the way language works in the mind, despite advances in psycholinguistics and neurolinguistics, is still largely unknown to us.

The analogy to laws of physics is not perfect, though. For one thing, the rules of language are not immutable. Every language has its own set of rules, and these rules change over time, which explains why Shakespeare's language seems very different from our own. Gravitation does not work differently in France than it does in the United States, nor did objects fall differently after Galileo refuted Aristotle's old theory.[4] Unlike physical laws, you **can** violate rules of grammar, although with some loss of intelligibility.

(3) *Her slept the bed until 10 o'clock.

No native speaker of English would consider sentence (3) to be well-formed. Clearly it violates some basic grammatical rules. But we can imagine someone—say a non-native speaker—uttering it, and we can figure out

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4. Aristotle had claimed that a heavier object would fall faster than a light one. Galileo showed that they fell at the same speed, although not—as legend has it—by dropping anything off the Leaning Tower of Pisa.

what is intended with a little more work than normal. But just try to violate the law of gravity!

It's important to remember that linguistic rules are formal abstractions. That is, by referring to a rule, we are not claiming that anyone is consciously applying it to produce language. We don't even need to assume that the rules are the unconscious steps that the brain performs when putting together language, although linguists would obviously like to know just what those steps are. Rules create a model that can be studied. Similarly, when we say a projectile follows a path, we mean we can describe where it goes, not that it chooses a particular course, or solves an equation in order to tell where to go next.

If linguistic rules resemble scientific equations, traditional prescriptive rules resemble table manners. You can eat your food perfectly well if you put your elbows on the table or chew with your mouth open. Many people do so all their lives. But if you want to join the local country club, watch out. Certain social circles expect you to follow the rules for table etiquette, and may exclude you if you violate them. Likewise, if you break prescriptive rules of language use, you will still be understood, but some may put you down as uneducated.

Like table manners, prescriptive rules are imposed by an outside authority. Traditional grammar puts great stock in authorities. Something is right or wrong because a book or a teacher tells us so. But who gets to decide? Some countries have a central body, such as the *Academie Française* in France, which pronounces on disputed issues. Whether such academies have any influence on actual language use is doubtful, but in any event neither the United States nor any other English-speaking country has such a group. Instead, prescriptions about grammar are

made by "arbiters of usage." This group is not an organized body; rather it consists of anyone in a position to influence how other people use language: authors, editors, journalists such as William Safire, writers of grammar textbooks and dictionaries. But those who have perhaps the greatest influence on the general public are classroom teachers. They are the ones who enforce the rules they believe are important when they correct student writing and speech. Even people who claim they don't remember, or never learned, any grammar in school can usually recall teachers with grammatical pet peeves who consistently criticized students for violating some rule or other.

Given the heterogeneous nature of this group, pronouncements on English usage vary widely from one another. Read any two usage manuals and you will likely find they contradict each other in many places. If you think about it, that's an odd situation. Prescriptive grammar begins with the assumption that there is a single standard form of the language which is correct. Why then can't the supposed experts agree? We're entitled to ask what criteria these authorities use to pass their own judgments. One purpose of this book is to equip you with the necessary tools to make your own judgments about issues involving language.

## Judging Grammaticality

Both prescriptivists and descriptivists often make statements about whether or not a particular utterance is grammatical. For a prescriptivist, deciding that an utterance is ungrammatical is the first step in eliminating error. For a descriptivist, observing what native speakers do not do gives important clues to understanding the tacit

rules of the language. But given the difference between descriptive and prescriptive rules, we have to be careful to specify what kind of grammar we have in mind.

If we call something **descriptively grammatical**, we mean that it obeys the usual practice of native speakers. Conversely, something that is *descriptively ungrammatical* violates the usual practice of native speakers. When linguists use the term ungrammatical by itself, they almost always mean descriptively ungrammatical. By convention, we mark something that is descriptively ungrammatical with an asterisk (*). Sentences (2) and (3) above illustrate sentences that are descriptively ungrammatical.

A common way that linguists determine whether something is descriptively grammatical is simply by asking a native speaker if the utterance sounds right or not. If we are studying our native language, we can be our own informant—in other words we can use our intuition and knowledge of how we and others speak to decide what is grammatical. This introspection makes it seem as if judgments about grammaticality are simple. But there are several factors that complicate the process. First, it isn't the case that anything which comes out of someone's mouth counts as descriptively grammatical. People do make slips of the tongue, or change their minds about what they were going to say halfway through the utterance, and the result can be word salad. The point is that such slips are not regular. They do not form an internally consistent set of rules. Remember that grammar, whether descriptive or prescriptive, implies following a rule of some kind. Second, native speakers will occasionally disagree in their intuitions. For example, the presence of regional or ethnic dialects means that something can be grammatical in one variety of English and ungrammatical in another. Despite

such differences, native speakers do show a large measure of consistency for most features of language.

If we call something **prescriptively grammatical**, we mean that it obeys the rules of usage which are listed in handbooks and taught in school.[5] Conversely, a prescriptively ungrammatical utterance violates those rules. In almost all cases, if something is descriptively ungrammatical, it is also prescriptively ungrammatical. That is, the authors of traditional grammar books would object to it too. In these cases, we can simply call the statement ungrammatical and mark it with an asterisk. But often prescriptive rules do not represent the way people ordinarily speak. In some cases, prescriptively grammatical utterances will sound formal, uncommon.

(4) !Whom shall I say is calling?

People may not commonly speak this way, but we still recognize sentence (4) as part of one register of English. We will indicate such sentences, which are only found in formal contexts, with an exclamation point (!).

Detecting a prescriptive violation when it is not also a descriptive violation can be hard because you cannot trust your instincts. Unless someone has taught you the rule, you may not notice the violation at all. Moreover, different handbooks differ in the rules they present. What may be prescriptively ungrammatical according to one book is just fine according to another. If we need to indicate something that is prescriptively ungrammatical but descriptively observed among native speakers, we mark it with the pound sign (#).

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5.  One complicating factor in deciding whether or not something is prescriptively grammatical is that grammar books and English teachers often disagree about what is correct. For simplicity's sake, we will assume that any rule which is widely found in many usage books counts.

(5) #Give Al Gore and I a chance.[6]

The final logical relationship between prescriptive and descriptive grammar—a statement that is prescriptively grammatical but descriptively ungrammatical—is possible, although rare. Such sentences follow prescriptive rules literally, but the result is something that no native speaker would ever utter. For example, many traditional grammar books claim that you must use a singular pronoun to refer to the indefinite pronouns. The following rule is found in Warriner's English Grammar, one of the most widely used high-school grammar books of the second half of the twentieth century:

"The words *each, either, neither, one, everyone, everybody, no one, nobody, anyone, anybody, someone, somebody* are referred to by a singular pronoun—*he, him, his, she, her, hers, it, its.*"[7]

Following this rule, we are supposed to write sentences such as (6a) rather than (6b), the latter of which reflects the way that most people actually use English:

(6a) !If someone calls, tell him I'll be out of town until Tuesday.

(6b) #If someone calls, tell them I'll be out of town until Tuesday.

But obeying this rule can, in some instances, lead to nonsense.

(7) ?Everyone in the room was speaking Spanish, so I spoke Spanish with him.

There is no way that *him* in (7) can be taken to refer to

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6. This sentence, uttered by Bill Clinton, violates the prescriptive rule that the case of the pronoun inside a coordination ("Al Gore and I") should be the same that you would use if the pronoun appeared alone (i.e., "give me a chance", hence "Give Al Gore and me a chance.").

7. John E. Warriner and Francis Griffith, English Grammar and Composition, rev. ed., Harcourt, Brace, and World (1965), p. 100.

*everyone*. If we're approaching this rule from the point of view of a linguist, it appears flawed because it makes a false prediction that (7) should be grammatical.[8] There is no special symbol for this situation, although the question mark can be used for any sentence whose grammatical status is ambiguous.

## Language Variation

We often speak of language as a monolithic entity that exists separately from its speakers. And while it is true that writing does give language an existence that is partly independent of people, language is fundamentally a mental process, existing in the minds of its speakers. And as individuals vary, so does their language. Languages vary at every level. Speakers of a language vary depending on their geographical origin, class, gender, and ethnicity. Even individuals do not speak a single form of language at all times; everyone has multiple styles and can shift the way they express themselves. For example, you probably don't speak the same way in a job interview as you do hanging out with your friends. All this variation gives rise, over time, to changes in the whole language. No matter what varieties of English you speak, it is different from the varieties spoken in Shakespeare's time. It is even different from the language spoken in the early part of the twentieth century. Language change is natural, inevitable, and unstoppable. The only languages that do not change, that show no variation, are dead languages.

If change is inevitable, that implies we must look to the

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8.  Warriner's suggests that for such sentences, it's acceptable to ignore the rule, but begs the question of why we should believe that the rule is correct in the first place if it creates such problems.

way people use language now to establish our notions of correctness. The prescriptive tradition pays lip service to the inevitability of change. The standard most frequently offered is that of "present, national, and reputable use."[9] That is, the usage of highly-regarded contemporary authors which is free of regional peculiarities. But often, the prescriptive tradition tends to treat change as bad, as evidence of corruption. It is conservative, clinging to older forms of the language well after they have died out in ordinary speech. For example, textbooks throughout the nineteenth century forced students to learn the old second person singular pronouns *thou*, *thee*, and *thine*, even though all but a handful of English speakers had abandoned their use over a century and a half earlier. Today, traditional grammar books continue to insist that students use *whom* in the appropriate place, although *whom* would seem to be defunct if we examine how people actually speak when they aren't consciously thinking about schoolbook rules.

## Language Equality

In the eighteenth and nineteenth centuries, the notion was widespread that some languages—generally presumed to be those of peoples with a primitive physical culture—either lacked a grammar completely, or had a very simple grammar. Versions of this story persist today, claiming that there is some tribe in a remote region of the world—the depths of the Amazon, or the highlands of New Guinea—who have a language of only a hundred words and no grammar. This myth was exploded once linguists

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9.   First formulated by George Cambell in his Philosophy of Rhetoric (1776). See Albert C. Baugh and Thomas Cable, A History of the English Language, 4th ed. (Englewood Cliffs, NJ, 1993), pp. 278-9.

began to study these languages and discovered that they had grammatical systems every bit as regular and elaborate as any language of a culture with a civilization stretching back thousands of years. Although the grammatical structures of some languages are very different from those of English, every language has a grammar.

What is true of languages also holds true of language varieties. Occasionally, you may hear it said that some dialect, such as African American Vernacular English (AAVE) or Puerto Rican Spanish, is ungrammatical or deficient. In truth, though, these dialects follow internally consistent rules. That is, they have their own consistent grammatical systems, but ones that differ from the grammars of other speakers of English or Spanish.

Sometimes, it is claimed that some thoughts cannot be expressed in a particular language or contrarily that an idea can only be uttered in one language. If true, that would presumably make some languages better than others. But such claims turn out to be hard to substantiate. What does it mean to say that a concept cannot be expressed in a language? Often, people seem to mean that one language has a particular word for a concept that another language lacks. For example, German has the term *schadenfreude*, which means "taking pleasure in the misfortune of others." Some English speakers borrow this word when they want to express the idea. Does that mean that we can't express the idea in English? The very act of explaining what the word means demonstrates that it is possible to express the idea. True, it may not be always possible to translate an idea word-for-word, but paraphrase and other techniques will get the job done. Languages are flexible enough to adapt and expand to the needs of speakers. And if speakers of a language need a particular concept often enough, they

will create a word to express it, either by relying on native word-creation processes or by borrowing the term from another language. Indeed, enough English speakers have found *schadenfreude* to be a useful term that it can now be found in the larger English dictionaries, although it still has the feel of a foreign word. Over three quarters of the words in Modern English, particularly the more advanced or scientific terms, are borrowed from other languages.

Other arguments for the intrinsic superiority of one language over another make equally little sense. Language is fundamentally an arbitrary convention. There is no principled reason why the animal that English speakers label *dog* must be identified with that particular string of sounds. Speakers of other languages get along just fine with entirely different strings of sound: *chien* in French, *perro* in Spanish, *gae* in Korean, *naayi* in Tamil, and so on. It would be unreasonable to say that one of these words was a more logical fit for the animal.

Similarly, we would laugh if someone asked us which is better, to put your adjectives before your nouns (as English does) or to put them after (as does Spanish). The question is fatuous. The order that each language follows is simply a convention that must be followed if we wish to be understood in that language. Evaluations of better or worse don't enter into the picture.

What holds for individual words and rules of a language holds for the whole collection of words and rules that constitute the language: there is no linguistic basis for declaring one language better than another. For the same reasons, it's impossible to find objective reasons to declare a particular dialect of a language superior to another dialect. This equality of dialects is important to stress because traditional grammar typically values one dialect

as proper and denigrates others as inferior corruptions. Labels like "substandard English," which are sometimes used in older works to label certain dialects of English, reflect such attitudes. In this view, correct grammar is an elite property of a few "correct" speakers. When traditional grammarians appeal to usage in order to justify their rules, they do not invoke the general usage of most people. They select a handful of prestigious writers as their models. Linguists try not to privilege the language of one group over another just because that group has the prestige in society. That distinction is social, not linguistic.

Many linguists do accept the practical usefulness of having a standard form, especially in writing, and most conform to the traditional notions of standard English in their professional work. But one can adopt a standard as an arbitrary convenience without bringing along with it elitist assumptions that using it makes you better than those who do not. Rather than conceiving of prescriptive violations as "errors" or "wrong", many linguists speak of sentences as being considered standardized or non-standardized. Teachers, for example, will often tell students "*ain't* is not a word." In a linguistic sense, of course, *ain't* certainly is a word. Among many groups, however, particularly those with power, it is not a socially acceptable one. That is, a linguist would find a sentence such as

(8) #They ain't coming.

to be perfectly grammatical, but unacceptable in many contexts, such as formal writing, a job interview, etc.

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2

# Chapter 2. A Crash Course in Linguistics

*Adapted from Hagen, Karl. Navigating English Grammar. 2020. Licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.*

Language is an extremely complex system consisting of many interrelated components. As a result, learning how to analyze language can be challenging because to understand one part you often need to know about something else. In general, this book works on describing English sentence structure, which largely falls under the category of syntax, but there are other components to language, and to understand syntax, we will need to know a few basics about those other parts.

This chapter has two purposes: first, to give you an overview of the major structural components of language; second, to introduce some basic concepts from areas other than syntax that we will need to make sense of syntax itself.

We can think of language both in terms of a message

and a medium by which that message is transmitted. These two aspects are partly independent of one another. For example, the same message can be conveyed through speech or through writing. Sound is one medium for transmitting language; writing is another. A third medium, although not one that occurs to most people immediately, is gesture, in other words, sign language. The message is only partly independent of the medium because while it is certainly possible to express the same message through different media, the medium has a tendency to shape the message by virtue of its peculiarities.

When we look at the content of the message, we find it consists of a variety of building blocks. Sounds (or letters) combine to make word parts, which combine to make words, which combine to make sentences, which combine to make a discourse. Indeed, language is often said to be a **combinatorial** system, where a small number of basic building blocks combine and recombine in different patterns. A small number of blocks can account for a very large variety indeed. DNA, another combinatorial system, uses only four basic blocks, and combinations of these four blocks give rise to all the biological diversity we see on earth today. With language, different combinations of a small number of sounds yield hundreds of thousands of words, and different combinations of those words yield an essentially infinite number of utterances.

The major components that have traditionally been considered the 'core' areas of linguistics are the following:

- **Phonology**: The patterns of sounds in language.

- **Morphology**: Word formation.

- **Syntax**: The arrangement of words into larger

structural units such as phrases and sentences.

- **Semantics**: Meaning. Semantics sometimes refers to meaning independent of any particular context, and is distinguished from **pragmatics**, or how meaning is affected by the context in which it is uttered. For the purposes of this book, we will work under the assumption that there really is no such thing as completely decontextualized meaning.

# Phonology

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Language varieties sound different from one another because they have different inventories of speech sounds. The sounds that you hear—combined into words that make sense—is called *phonology*. There is no clear limit to the number of distinct sounds that can be constructed by the human vocal apparatus. To that end, this unlimited variety is harnessed by human language into sound systems that are comprised of a few dozen language-specific categories known as *phonemes* (Szczegielniak). Phonology is the systemic study of sounds used in language, their internal structure, and their composition into syllables, words, and phrases. Sounds are made by pushing air from the lungs out through the mouth, sometimes by way of the nasal cavity (Kleinman). Think about this: All humans have a different way of pronouncing words that produce various sounds. Tongue movement, tenseness, and lip rounding (rounded or unrounded) are some examples in which sounds or even words are produced in different ways. Consider, for example, the sound of the consonant /ð/

represented by the written <th> in the English word <the>—this sound does not exist in French, but we can understand someone whose first language is French when they pronounce the same word with a /z/. Phonology seeks to explain the patterns of sounds that are used and how different rules interact with each other. Phonology is concerned more about the structure of sound instead of the sound itself; "Phonology focuses on the 'function' or 'organization' or patterning of the sound" (Aarts & McMahon pg. 360)

Every language variety has an inventory of sounds (essentially, they have different numbers of phonemes) and rules for those sounds. By way of illustration, in English, the phoneme /ŋ/, the last sound in the word *sing*, will never appear at the beginning of a word, but in some other languages, words can begin with /ŋ/.

Throughout this section, we will use the conventional / / slashes to indicate International Phonetic Alphabet representations of phonemes (the sounds of language) and < > brackets to indicate orthography (the way things are spelled in the standardized English writing system).

**Phonemes**

Say the following out loud: *Vvvv*. It has a "buzz" sound that *ffff* does not have, right? Keep in mind that the "buzz" sound is caused by the vibration of your vocal folds. Speech sounds are produced by moving air from the lungs through your larynx, the vocal cords that open to allow breathing—the noise made by the larynx is changed by the tongue, lips, and gums to generate speech. Most importantly, however, sounds are different from letters that are in a word. For example, a world like English has seven letters (<English>), six sounds (/ ɪ ŋ ɡ l ɪ ʃ /), and two syllables (eng·lish). We often tend to think of English

as a written language, but when studying phonology, it's important not to conflate sounds and letters. This is more often true in English than in many other languages that use alphabets for their scripts; not only are the correspondences between sounds and letters not always one-to-one, sounds are often pronounced in many ways by different people. When you are speaking to someone, you automatically ignore nonlinguistic differences in speech (i.e., someone's pitch level, rate of speed, coughs) (Szczegielniak).

Phonemes are a vital part of speech because they are what dictates how a sound of letter or word is distinguished which differentiates the meaning of words. Sometimes a letter represents more than one phoneme (<x> is often pronounced /ks/) and sometimes two or three letters are used to represent a single sound (like <sh> for the phoneme / ʃ / ).

The sounds of a word can be broken down into **phonemes**, the smallest units of sound that distinguish meaning. These basic sounds can be arranged into syllables and a metrical phonological tree can be used to simplify breaking up a syllable (AAL Alumnae, Gussenhoven & Haike).

There are about 200 phonemes across all known languages; however, there are about forty-four in the English language and the forty-four phonemes are represented by the twenty-six letters of the alphabet (individually and in combination). The forty-four English sounds are thus divided into two distinct categories: consonants and vowels. A consonant gives off a basic speech sound in which the airflow is cut off or restrained in some way—when a sound is produced. On the other hand, if the airflow is unhindered when a sound is made,

the speaker is producing a vowel. (DSF Literary Resources).
Even with diphthongs, or sequences of two vowels, your
tongue changes when you say a different vowel.

A syllable consists of an initial sound or onset and
followed by another sound called a rhyme. A rhyme is
further split into a nucleus which are the vowel sounds
and the coda which are the consonants that come after
the nucleus. The onset is simply the consonants before the
rhyme. These aspects are all brought together to identify
the differences of languages due to each language's unique
phonemes and syllable structures. (AAL Alumnae, n.d.).

### Phonology and Phonetics

The study of phonology is closely related to another field,
**phonetics**. Phonetics involves the study of the way sound
is produced by certain parts of the body. The synchronous
use of body parts like the mouth, teeth, tongue, voice box
or larynx, and pharynx are involved with making speech
sounds and what sounds exist in a language, and in sign
languages, the shape and position of fingers and hands
serves a similar purpose. Phonology and phonetics
together can even analyze the distinction between
distinctive accents or challenges native speakers may face
attempting to acquire another language when facing
phonemes that are not a part of their language (FSI, n.d.;
Gussenhoven & Haike, 2017, p. 17).

### Minimal Pairs and Allophones

Understanding how to pronounce and to make a clear
distinction of letters is essential to the structure of a
language sound system. In English and other languages,
there are many words that sound similar to one another,
but differ in a single sound, like 'pit' and 'bit', or like 'leap'
and 'leave'. Linguists call these minimal pairs. "Minimal
pairs are word that differs in one phoneme" (McArthur

Oxford Reference). Even though they end identically both words are completely unrelated to each other in meaning. Minimal pairs are useful for linguists because they provide comprehension into how sounds and meanings coexist in language. They tell us which sounds (phones) are distinct phonemes, and which are allophones of the same phoneme.

Allophones are a related concept, in which a single phoneme can be produced differently in different circumstances. For example, the phoneme /k/ in the word 'kite' is aspirated, meaning it's accompanied by a puff of air. But in the word 'sky' there is no puff of air along with the /k/ sound. We still think of these as the same sound, and they don't occur in the same positions, which makes them allophones of a single phoneme.

Allophones are determined by their position in the word or by their phonetic environment. Speakers often have issues hearing the phonetic differences between allophones of the same phoneme because these differences do not serve to distinguish one word from another. In English, the /t/ sounds in the words "hit," "tip," and "little" are all allophones (Britannica)—they are all realizations the same phoneme, though they are different phonetically in terms of how they are produced.

**The relationship between syntax and phonology**

Syntax and phonology are both structural components of language, but it is common to think of them as parallel levels of structure that do not often interact. What they both address at their core is the structure of the language, but we could consider **morphology** (described in the next section) to mediate between the two.

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# Morphology

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**Definition**

Morphology is a branch of linguistics that deals with the structure and form of the words in a language (Hamawand 2). In grammar, morphology differs from syntax, though both are concerned with structure. Syntax is the field that studies the structure of sentences, which are composed of words, while morphology is the field that studies the structure of the words themselves (Julien 8). Unlike phonology, covered earlier, morphology is more directly related to syntax, and will see some coverage in this textbook.

**Morphemes**

In language, some words are made up of one indivisible part, but many other words are made up of more than one component, and these components (whether a word has one or more) are called morphemes. A morpheme is a minimal unit of lexical meaning (Hamawand 3). So, while some words can consist of one morpheme and thus be minimal units of meaning in and of themselves, many words consist of more than one morpheme. For example, the word *peace* has one morpheme and cannot be broken down into smaller units of meaning. *Peaceful* has two morphemes, *peace* the state of harmony that exists during the absence of war, plus *-ful*, a suffix, meaning full of something. Peacefully has three morphemes: *peace + –ful + –ly*, with the final morpheme *–ly* indicating 'in the manner of'. So really, *peacefully* contains three units of meaning that, when combined, give us the meaning of the word as a whole. Words can have a lot more than three morphemes, however (Kurdi 90).

**Comparative Morphology**

In some languages, there are only simple words and straightforward compounds, and therefore very little morphology—most of the grammatical complexity is

syntactic in these languages. Languages like these are referred to as having an **isolating morphology**. On the other end of the scale, languages that combine many morphemes to produce words are referred to as **polysynthetic**. Polysynthetic essentially means that the language is characterized by complex words consisting of several morphemes, in which a single word may function as a whole sentence. Other types of language morphology in between are **fusional** (where morphemes often encode multiple meanings or grammatical categories at once) and **agglutinative** (where morphemes are added on to each other to create long words, but generally have individual meanings). Modern English is closer to the isolating end of the spectrum, while still having a productive morphology on some morphemes. Languages like this are known as analytic languages, in which sentences are constructed by following a specific word order.

**Types of morphemes**

Morphemes can be further divided into several types: free and bound. Free morphemes are the morphemes that can be used by themselves. They're not dependent on any other morpheme to complete their meaning. Open-class content words (generally speaking, nouns, verbs, adjectives, and adverbs) such as *girl*, *fish*, *tree*, and *love* are all considered free morphemes, as are closed-class function words (prepositions, determiners, conjunctions, etc.) such as *the*, *and*, *for*, or *it* (Hamawand 5). Bound morphemes are another class of morphemes that cannot be used by themselves and are dependent on other morphemes, like the *-er* in *worker*.

Bound morphemes are further divided into two categories: affixes and bound roots (Kurdi 93). Bound roots are roots that cannot not be used by themselves. For

example, the morpheme *-ceive* in *receive, conceive,* and *deceive* cannot stand on its own (Aarts et al. 398). Affixes occur in English primarily as prefixes and suffixes. Prefixes are morphemes that can be added to the front of a word such as *pre-* in *preoccupation, re-* in *redo, dis-* in *disapprove* or *un–* in *unemployment.* Morphemes that can be added to the end of a word (a suffix) such as *–an, -ize, -al,*or *-ly.* In other languages, there are morphemes that can be added to the middle of a word called infixes, and morphemes that can be added to both sides of a word called circumfixes. English also has limited infixation, usually in casual speech and involving taboo language: consider *abso-goddamn-lutely* or *un-fucking-believable.* In terms of function, affixes can be divided into two categories of their own: derivational affixes and inflectional affixes (Hamawand 10).

### Types of affixes

Derivational affixes are affixes that when added to a word create a new word with a new meaning. They're called derivational precisely because a new word is derived when they're added to the original word, and often, but not always, these newly created words belong to a new grammatical category. Some affixes turn nouns into adjectives like *beauty* to *beautiful,* some change verbs into nouns like *sing* to *singer,* and some change adjectives to adverbs, like *precise* to *precisely.* Still others turn nouns to verbs, adjectives to nouns, and verbs to adjectives. Other affixes do not change the grammatical category of the word they're added to. Adding *-dom* to *king* yields *kingdom,* which is still a noun, and adding *re-* to *do* yields *redo,* still a verb. We use derivational affixes constantly and they're a very important part of English because they help us to form the majority of words that exist in our language (Aarts et al. 527-529).

In English, the other type of affix, inflectional affixes, are suffixes that when added to the end of the word don't change its meaning radically. Instead, they change things like the person, tense, and number of a word. English has a total of eight inflectional affixes:

- (on verbs) the third person singular –s as in *Anakin kills younglings*,
- (on verbs) the preterite (and participial) -ed as in *Ron kissed Hermione*,
- (on verbs) the progressive –ing as in *Han is falling into the sarlacc pit*,
- (on verbs) the past participle –en in *the Emperor has fallen and cannot get up*,
- (on nouns) the plural –s in *vampires make the worst boyfriends*,
- (on nouns) the possessive -'s in *that's Luke's hand isn't it*,
- (on adjectives) the comparative –er in *the car is cooler than Kirk*, and
- (on adjectives) the superlative –est in that's the sweetest thing I've ever seen.

Compared to other languages English has very few inflectional affixes. (Aarts et al. 510), but they're a common point where confusion emerges, particularly in writing. For example, the third person singular -s, the plural -s, and the possessive -'s are all pronounced identically, but the possessive often uses an apostrophe.

### The Relationship between Morphology and Syntax

Morphology and Syntax are closely related fields in

English grammar. Syntax studies the structure of sentences, while morphology studies the formation of words. However, both domains must interact with each other at a certain level. On one level, the morpheme should fit a syntactic representation or a syntactic structure. And on another level, the morpheme can have its syntactic representation. That notion is called "the syntactic approach to morphology" by Marit Julien (8).

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## Speech vs. Writing

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We first learn to speak when we are children, and we do this for at least five years of our lives before we learn to write. Once we learn to do both of these, we think we

have mastered the ways of communicating, forgetting that: 1) these two are not the only ways we communicate, and 2) the line, in some cases, is blurred concerning the difference between speech and writing.

Linguists have given more attention to oral communication, giving it more authority and validation, which suggests that written communication is secondary—we learn to speak before we learn to write. However, both speech and writing are forms of language use and deserve equal amounts of recognition.

**Differences between Speech and Writing**

Let's take a deeper look at writing and speech. What are some of the distinctions between them? Writing is edited; we can more easily delete or rewrite something over again to make sure how we want to come across is shown in our writing. We can prewrite and brainstorm, which is an effective way of writing (Sadiku 31). This is something we cannot do as we speak. Another reason writing is different from speech because writing is not something everyone can do. Literacy, or the ability to read and write, is not universal, though it is more common today than in previous eras. In some communities today, there are individuals who do not have the skill of writing amongst their neighbors who can. Among the 7000+ languages that exist in the world, more than 3,000 do not have a written language ("How Many Languages in the World Are Unwritten?") and only 23 languages are spoken by half the population of the world ("Languages in the World"). Written language has historically been seen as a mark of prestige.

The majority of people learn how to speak by the time they are two years old. As we communicate through speech, we have the option of speaking informally or formally.

Someone who only speaks formally might find that others say, "You talk like a book" (Bright 1); the book being a textbook or some form of an academic book. However, we all lean towards informal speech when we are surrounded by people we are comfortable with or when we want to be casual.

A greater range of expression is available when using speech because you can use the tone of your voice to express how you feel when you talk about a certain topic. However, the way you use your voice can have many meanings. For example, shouting can mean that you are angry, excited, or surprised. Sometimes you might have to use an extra sentence to connect your tone of voice to how you feel. With writing, a lot of this paralinguistic content (pitch contours, tone of voice) is not available to the reader, but there are strategies writers use like writing in all capital letters or using various forms of punctuation (not a feature available in speech) to compensate.

Finally, a distinction of writing is its durability. Composed messages are passed on through time as well as through space. With writing, we can keep in touch with somebody nearby or on the opposite side of the world (although advances in communication technology have made this true of speech as well).

**Similarities between Speech and Writing**

In the sections above, we've examined differences between speech and writing, but these two forms of language and communication do have similarities as well. Let's take the example of formal and informal writing and speech. As mentioned before, we can talk informally—talking casually in conversations, or when you're talking to someone close to you—and this can be done by using slang, short words, and a casual tone of

voice. While writing is often thought of as formal by nature, informal writing can also be acceptable in a number of contexts, like freewriting. This is one of the ways we can write informally. In this form of writing, we can write down all the things that come to mind, however we want to write it; it doesn't matter the quality of the writing or how we produce sentence structure (Elbow 290). Informal writing can also be found in much of what is called Computer-Mediated Communication, or CMC. One example is personal blogs, which are often different from more formal news articles. Blog posts have more flexibility to be informal because most people write with a conversational tone to appeal to their audience.

Writing has often been differentiated from speech by the nature of its participation. According to classical views, when we write, we write by ourselves; writing is done independently. Speech on the other hand is understood to take more than one person because we need at least two people to hold a conversation; therefore, speech is dependent on another person. However, technology has blurred the lines here as well. For example, take the CMC mode of the internet forum (Elbow 291). This media is a form of constant writing where we can continuously respond to people without interruption. This has been set in place since the 70s and one that is popular today that has a collection of forums pertaining to different topics is Reddit. YouTube is also a great example of this because while we watch a video on a particular topic, we can then respond in the comment section immediately and give our own opinions. This conversation can continue with the person in the video and other people that may agree or disagree with you.

**Speech, Writing, and Syntax**

Syntax is the way words are arranged to form sentences, and is a part of all linguistic communication, regardless of whether it is written or spoken. However, there can be differences in the syntax of speech vs. writing. In a study with 45 students, Gibson found that speech "has fewer words per sentence, fewer syllables per word, a higher degree of interest, and less diversity of vocabulary" (O'Donnell, 102). In another study that Drieman did in Holland, he found that speech, compared to writing, has "longer texts, shorter words, more words of one syllable, fewer attributive adjectives, and a less varied vocabulary" (O'Donnell, 102).

While many think of prescriptive rules applying primarily to written grammar, speech is seen as more lenient, allowing for fluidity nor replicated in written works. However, it comes with own fair share of complexities and rules that need to be managed, one of them being syntax. Syntax is the structuring of words and their overall arrangement in relation to each other. Even though grammar isn't as strict when it comes to writing a lot of the same principles follow, words need to flow in a cohesive manner that is understandable to others. Even with slang and regional dialect coming into play, syntax creates a cohesive use of language during a conversation. Even in complex usages of language such as code-switching (the use of multiple language varieties in a single discourse event) the necessity for clear structure and communication lies under all of that. In *Code Switching and Grammatical Theory* the idea is presented that even with code switching in the middle of a sentence, there is a grammatical structure: "In individual cases, intra-sentential code switching is not distributed randomly in

the sentence, but rather it occurs at specific points" (Muysken, 155).

### Conclusion

Even though both speech and writing require the use of syntax to remain cohesive, the differences between writing and speech are clear and abundant; as Casey Cline writes, "Speech is generally more spontaneous than writing and more likely to stray from the subject under discussion." (Cline, *Verblio*). Written works, on the other hand, are usually seen as something that must stay grammatically correct, thus not being able to always mimic the freedom of speech. As put in *Grammar for Writing?* "... Grammar is frequently presented as a remediation tool, a language corrective." (Debra Myhill, 4). However, formal speech and informal writing have existed for a long time, and new communications technologies have increasingly challenged the distinctions between speech and writing.

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# Semantics

Semantics, or the study of meaning in language, is one of the most complex subfields of lingusitics. Semantics can be approached on the word level, examining the meanings of particular words (**lexical semantics**), or on the level of **compositionality**, in which the way in which meanings interact and compose larger meanings is examined.

**Lexical Semantics**

*Adapted from Anderson, Katherine. Essentials of Linguistics.*
*10.1 Elements of Word Meaning: Intensions and Extensions*

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One way to define the meaning of a word is to point to examples in the world of things the word refers to; these examples are the word's **denotation**, or **extension**. Another component of a word's meaning is the list of attributes in our mind that describe the things the word can refer to; this list is the **intension** of a word.

If someone asked you, "What's the meaning of the word *pencil*?" you'd probably be able to describe it — it's something you write with, it has graphite in it, it makes a mark on paper that can be erased, it's long and thin and doesn't weigh much. Or you might just hold up a pencil and say, "This is a pencil". Pointing to an example of something or describing the properties of something, are two pretty different ways of representing a word meaning, but both of them are useful.

One part of how our minds represent word meanings

is by using words to refer to things in the world. The **denotation** of a word or a phrase is the set of things in the world that the word refers to. So one denotation for the word *pencil* is this pencil right here. All of these things are denotations for the word *pencil*. Another word for denotation is **extension**.

If we look at the phrase, *the Prime Minister of Canada*, the denotation or extension of that phrase right now in 2017 is Justin Trudeau. So does it make sense to say that Trudeau is the meaning of that phrase *the Prime Minister of Canada*? Well, only partly: in a couple of years, that phrase might refer to someone else, but that doesn't mean that its entire meaning would have changed. And in fact, several other phrases, like, *the eldest son of former Prime Minister Pierre Trudeau*, and *the husband of Sophie Grégoire Trudeau*, and *the curly-haired leader of the Liberal Party* all have Justin Trudeau as their current extension, but that doesn't mean that all those phrases mean the same thing, does it? Along the same lines, the phrase *the President of Canada* doesn't refer to anything at all in the world, because Canada doesn't have a president, so the phrase has no denotation, but it still has meaning. Clearly, denotation or extension is an important element of word meaning, but it's not the entire meaning.

We could say that each of these images is one extension for the word *bird*, but in addition to these particular examples from the bird category, we also have in our minds some list of attributes that a thing needs to have for us to label it as a bird. That mental definition is called our **intension**. So think for a moment: what is your intension for the word *bird*? Probably something like a creature with feathers, wings, claws, a beak, it lays eggs, it can fly. If you see something in the world that you want to label, your mental grammar uses the intension to decide whether that

thing in the word is an extension of the label, to decide if it's a member of the category.

One other important element to the meaning of a word is its **connotation**: the mental associations we have with the word, some of which arise from the kinds of other words it tends to co-occur with. A word's connotations will vary from person to person and across cultures, but when we share a mental grammar, we often share many connotations for words. Look at these example sentences:

(1) Dennis is cheap and stingy.

(2) Dennis is frugal and thrifty.

Both sentences are talking about someone who doesn't like to spend much money, but they have quite different connotations. Calling Dennis cheap and stingy suggests that you think it's kind of rude or unfriendly that he doesn't spend much money. But calling him frugal and thrifty suggests that it's honorable or virtuous not to spend very much. Try to think of some other pairs of words that have similar meanings but different connotations.

To sum up, our mental definition of a word is an intension, and the particular things in the world that a word can refer to are the extension or denotation of a word. Most words also have connotations as part of their meaning; these are the feelings or associations that arise from how and where we use the word.

### Compositionality and Ambiguity

*Adapted from Anderson, Katherine. Essentials of Linguistics.*
*9.1 Ambiguity*
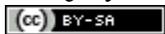
One core idea in linguistics is that the meaning of some combination or words (that is, of a compound, a phrase

or a sentence) arises not just from the meanings of the words themselves, but also from the way those words are combined. This idea is known as **compositionality**: meaning is composed from word meanings plus morphosyntactic structures.

If structure gives rise to meaning, then it follows that different ways of combining words will lead to different meanings. When a word, phrase, or sentence has more than one meaning, it is **ambiguous**. The word *ambiguous* is another of those words that has a specific meaning in linguistics: it doesn't just mean that a sentence's meaning is vague or unclear. *Ambiguous* means that there are two or more distinct meanings available.

In some sentences, ambiguity arises from the possibility of more than one syntactic structure for the sentence. Think about this example:

*Hilary saw the pirate with the telescope.*

There are two interpretations available here: one is that Hilary has the telescope, and the other is that the pirate has the telescope. Later in this course, you will be able to explain the difference by showing that the prepositional phrase (don't worry about what that is yet) *with the telescope* is connected to a structure controlled by either *pirate* or by *saw*. This single string of words has two distinct meanings, which arise from two different grammatical ways of combining the words in the sentence. This is known as **structural ambiguity** or **syntactic ambiguity**. Structural ambiguity can sometimes lead to some funny interpretations. This often happens in news headlines, where function words get omitted. For example, in December 2017, several news outlets reported, "Lindsay Lohan bitten by snake on holiday in Thailand", which led

a few commentators to express surprise that snakes take holidays.

Another source of ambiguity in English comes not from the syntactic possibilities for combining words, but from the words themselves. If a word has more than one distinct meaning, then using that word in a sentence can lead to **lexical ambiguity**. In this sentence:

*Heike recognized it by its unusual bark.*

It's not clear whether Heike recognizes a tree by the look of the bark on its trunk, or if she recognizes a dog by the sound of its barking. In many cases, the word *bark* would be disambiguated by the surrounding context, but in the absence of contextual information, the sentence is ambiguous.

3

# Chapter 3. Word Categories

## Pre-Chapter Resource: Quick Guide To Word Categories

*Matt Garley*

The guiding principle in this course is that *a word's part of speech is determined by what role it plays in the sentence*. Words that look the same might be different parts of speech depending on where they are and their relationships to other words.

- **Noun (N)** – Nouns are words that represent people, places, things, and ideas. If you can put 'the' in front of it and it's a complete phrase, it's a noun.

Some nouns don't allow 'the', though. Nouns can be common or proper, singular or plural, and function as part of *Noun Phrases* to act as the *subject* of sentences (though they can also be *objects* or *complements*). Nouns can be singular or plural in English. Nouns include the subcategory *pronouns*, which you might be used to treating as a separate category. Pronouns really stand in for entire noun phrases in syntax, but for this course, it's simplest to treat them as nouns. There are several kinds of pronouns—the most familiar ones are *personal pronouns* like *I, you, me, he, she, us, ourselves, we, me,* etc. Another kind is demonstratives (like 'this' in 'this is nice' or 'those' in 'those were my favorite'). NOTE: In this class, we'll consider most of the "possessive pronouns" like *my* or *your* to be *determiners* because they function like determiners. Many question words like *who* or *what*, and 'empty' words that stand in as subjects of sentences, like *it* and *there* in ***it's raining*** or ***there's a dog in the house*** can be considered pronouns/nouns. Examples of nouns: dog, freedom, Kentucky, John, meals, deer, sand, fights, running (in *Running is my favorite activity*), destruction, group, party, we, myself, that

- **Verb (V)** – This category is also called main verbs or lexical verbs. These include the 'action' verbs but not all indicate actions (other indicate situations or states of being). Every sentence in standardized English has to have a main verb, which functions as the *head* of the *Verb Phrase predicate.* A sentence with multiple *clauses* will have one main verb for

each clause. The main verb generally indicates the main action, situation, or relationship in the sentence. Main verbs can have different forms, like the *preterite* ('flew'), the *gerund* ('flying') and the *participle* ('flown'), and most of them change form in the $3^{rd}$ *person singular* (*I **walk** but he/she/it **walks***). Remember that auxiliary verbs are considered a different category. Examples of verbs: hit, been, jammed, running (in *she is running*), becomes, slept, falling, dies, bring.

- **Adjective (Adj)** – Adjectives describe (or more precisely, *modify*) nouns. Adjectives usually appear in the noun phrase before a noun and after any determiners. (the <u>hungry</u> dog, five <u>tired</u> students) but can also appear in the predicate after a linking verb (the dog is <u>hungry</u>, five students seem <u>tired</u>.) Adjectives often have *comparative* and *superlative* forms (better, best, colder, coldest). Adjectives do not describe anything that isn't a noun—*if a word is describing a verb, another adjective, or an adverb, it's an adverb instead.* Examples of adjectives: cool, fun, angry, uglier, nicest, complicated, sensible, first, unbelievable, ridiculous, *running* (in *it's a running gag*)

- **Adverb (Adv)** – Adverbs are parallel to adjectives, but they modify (and describe) things that aren't nouns, from verbs, adjectives, and other adverbs, all the way up to entire sentences. Adverbs are kind of the 'catch-all' of the parts of speech, and it's pretty much impossible to give a concise and complete definition of what an adverb is, because different adverbs have different properties. Some are made

from adjectives + *ly* but not all -*ly* endings are adverbs (lovely and ugly are adjectives, not adverbs). Adverbs generally answer some questions about the things they modify, like 'how', 'when', and 'to what extent.' Adverbs are the only things that can go between auxiliary and main verbs, and if something can move around a lot in the sentence without changing the meaning (especially to the front and back of the sentence) then it's probably an adverb. Examples of adverbs: *yesterday (*in *we went to the store yesterday*) *very* (in *very good*) *often* (in *we go to school often*), *not* (in *I'm not sorry*), *just, quickly,* and many more.

- **Determiner (D)** – Also known as determinative. Goes with a noun and specifies something about that noun (but doesn't quite *describe it* the way an adjective does.) Articles are one type of determiners (*a, the, an*) but demonstratives (**this** cat, **these** shoes) that go with nouns, possessive 'pronouns' like *my, your, her* (with nouns), possessive nouns like 'Mike's', quantifiers with nouns (*many, most, some*), numerals with nouns (**one** cat, **seventeen** cats, **zero** cats) and the question word *which* with a noun are all also determiners. Determiners are always part of *noun phrases* and come before any adjectives describing the *head noun*. Examples of determiners: a, the, seventeen, my, her, many, all, most, no (in *we have no bananas*), John's

- **Aux Verb (Aux)** – Auxiliary verbs or helping verbs are a closed class in English (there's a limited number of them). The *modal verbs* are *can, could, may, might, shall, should, will, would,* and *must*.

These are always auxiliary verbs, and never main verbs (except for 'canning' or 'willing' as verbs, with different meanings). The other auxiliary verbs are forms of *be, do,* and *have*, which are words which can sometimes act as main verbs. As auxiliary verbs, they create the perfect, progressive, dummy, and passive constructions. Auxiliary verbs are never the only verb in a sentence, so if one of those three words (be, do, and have) is the only verb in a sentence, they're acting as main verbs. More than one auxiliary verb can work together to modify the main verb, like in *I <u>might have been</u> shopping yesterday.*

- **Preposition or Particle (P)** – Prepositions express a relationship between (mostly) nouns and noun phrases and other things in language. Again, this is one of the messier categories to define. This is a fairly large but closed class of words, and most of them are short words. They can express relations in real space or time (before, after, to, from, in, out, over, under) or more metaphorical relationships between words (of, for). Complex prepositions can be multi-word phrases like *next to* or *instead of*. Particles are words that usually look like prepositions, but that actually work as part of main verbs. An example is *up* in *run up a bill at a restaurant*. *Up* here does not indicate a direction but changes the meaning of the verb *run.* In *run up a tree at a park*, *up* is functioning as a preposition, as it doesn't change the meaning of the verb and relates to the tree. Note that in this class, for the sake of simplicity, we're going to consider particles

a part of the Preposition (P) category, even though they have different functions to some extent. Examples of prepositions/particles: to, for, about, over, from, away, toward, beneath, inside, up, around, after

- **Coordinator (Co)** – Also known as coordinating conjunctions, these words combine <u>two equal categories</u>, like nouns, verbs, noun phrases, verb phrases, or clauses. Coordinators are a closed class that is fairly easy to remember. *And, but,* and *or/nor* are the most common coordinators and are always coordinating conjunctions. *For, yet,* and *so* can also be coordinators but might be functioning in other categories as well. There are also complex coordinators that consist of multiple words like 'as much … as' and 'neither … nor'.

- **Subordinator (Sub)** – These words attach a subordinate (dependent) clause to a main (independent) clause. These words are harder to precisely understand until we get to clauses and their relationships. *Because, that, since,* and *while* are some common subordinators, but there's a longer list as well.

- **Interjection (Int)** – These are words like *hello*, *wow*, and *yeah*, that don't really participate in syntax. They are not a main focus of the course, as they don't generally enter into relationships with other words, syntactically.

# Word Categories

One of the first things that people noticed when they started thinking about language as language was that words tend to fall into categories and that the members of these categories behave in similar ways. The traditional name for those categories is the "parts of speech." In this chapter, we will look at these word categories and see how the traditional account is somewhat misleading, as well as inaccurate. With a more accurate idea of word categories, we will be equipped with the basics that we need to begin studying sentence structure.

## The Traditional View of Parts of Speech

You may have forgotten much of the grammar you were taught in school, if you were taught any at all, but most people can remember the parts of speech, at least the major ones. What is a noun? You probably said "a noun is a person, place, or thing." A verb? It describes an action, right? What about a preposition? You may have had more difficulty here, but perhaps you learned that prepositions tell you what an airplane can do to a cloud (go through, under, into, etc.). All of these definitions are well-entrenched in our educational system, but linguists are happy with none of them. If we scrutinize them, the traditional parts of speech turn out to be problematic. Consider the traditional definitions of noun and verb:

> Noun: A noun is a person, place or thing.
> Verb: A verb describes an action or state of being.

These definitions cover what we might call prototypical cases. Nouns often do label objects in the real world (*car, tree, apple*, etc.) and verbs most commonly express action (*run, play, eat*, etc.). But what do we do with abstract nouns like *love* or *destruction*? One easy way out is to add "idea" to the definition, but this change comes at a severe cost, for "idea" can be taken to encompass just about everything. Consider sentences such as

(1) John gave him a shove.
  (2) John shoved him.

What allows us to say that *shove* in sentence (1) functions as a noun, but *shoved* in sentence (2) functions as a verb? The meaning of both sentences, after all, is essentially the same. And how do we account for verbs like *hear* or *undergo*? In a sentence like

(3) Vivica underwent a tonsillectomy as a child.

the subject does not really perform an action, nor does the verb describe a mere state of being. It actually describes a change of state. If we broaden our definition to say that a verb tells us something about some person or thing, it becomes difficult to explain the difference between verbs and adjectives. The traditional definitions of parts of speech often fail because they look for semantic definitions. These definitions may cover the usual situations acceptably, but any definition that covers all cases becomes so vague as to be useless for making discriminations. Another problem with the common way

of presenting parts of speech stems from their origins in Latin grammar. The term part of speech, and most of the labels themselves, were borrowed from the study of Latin.[1] When English was first subjected to grammatical analysis, Latin was the language of educated Europeans, and it was presumed to represent an ideal, logical grammar. Therefore the earliest writers of English grammar books simply applied the terminology and classification they knew from Latin to the description of English. Because the two languages have significant grammatical differences, however, the fit was not perfect. Most Latin grammars described eight parts of speech: nouns, pronouns, verbs, adjectives, adverbs, prepositions, conjunctions, and interjections. If one didn't look too closely at the details, these categories worked, more or less, for English. But there were many problematic cases that troubled grammarians from the start. How, for example, should one handle the word *the*, or the word *to* when it appears in front of a verb? Latin had no direct equivalent to either word, but some grammarians tried to force these words to fit the Latin categories anyway. Therefore, *the* was considered an adjective and *to* (even in *to go*) was called a preposition. Other grammarians disagreed, creating new categories for these words. This disagreement was never resolved in traditional grammar, and to this day, different textbooks make conflicting statements about these words.[2]

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1.  "Part of speech" is a literal translation of the Latin pars orationis.

2.  Today, the reason some textbooks differ is likely that they have been influenced by more recent linguistic grammars, but even in the nineteenth century there was never perfect consensus. See, for example, Goold Brown, The Grammar of English Grammars, 6th ed. (1862), who argues for ten parts of speech. This lack of consensus is worthy of note because some textbooks confidently speak of eight parts of speech as if the whole issue had been settled centuries before.

# The Linguistic View

Given all this confusion over the concept of parts of speech, it's reasonable to ask if we can't just get rid of the concept completely. Why do we really need to know what a noun is? In fact, the problems with traditional parts of speech have prompted some linguists to abandon the term part of speech completely. They have not, however, given up on the idea behind the label. The term part of speech simply means "a word category." In other words, it reflects the important observation that words can be grouped into categories because they behave similarly. For example, consider how we can complete the following sentence frames:

(4) She has no ____.
(5) She can ____.


The first sentence can be completed with words like *bicycle, shoes, worries, ability, home, chill,* etc., that is, with nouns, but not with words like *went, happy, in, or cheerfully* (verb, adjective, preposition, and adverb respectively). The second sentence works with words such as *hide, fly, delay, lie, cry,* etc. (verbs), but not *shoes, beautiful, happily, into,* etc. Such sentence frames show that there's more to a word than its meaning. Words also belong to categories, and knowing membership in a particular category lets us predict where the word can fit in the sentence.

(6) *My sons both graduation high school.

A sentence like (6) is ungrammatical because the slot that *graduation* occupies in the sentence requires a verb, not because the general meaning of *graduation* is inaccurate.

Some linguists avoid the term *parts of speech* and prefer to speak simply of *categories*. What is gained by changing the terminology?

It is true that "parts of speech" is misleading if we take the expression literally, as components of language. Clearly, there are many more parts to language than word categories. On the other hand, "part of speech", as a term of art, differs little in its basic meaning from *category*.

It's really the implication of the term–its association with old grammar books–that causes some to avoid it. I, however, find it hard to see enough difference between the two terms to justify abandoning so familiar a term as "part of speech." Although traditional definitions are muddled, in practical terms, older grammarians meant largely the same thing as modern linguists do with major categories such as noun, verb, or adjective. Even where old fashioned grammarians could not explain the parts of speech adequately, they would still assign the majority of words to the same categories linguists do. (The exceptions, we will see shortly.) In other words, even if traditional grammarians did not define what they were doing very well, their intuitions about these categories led them to many of the same conclusions. So the lexical categories are essentially the same thing as the parts of speech. The fact that the details differ doesn't really affect that essential similarity.

The insistence upon the generic term *category*, however, does have the virtue of emphasizing just what the parts of speech are, something that is opaque in the traditional term. For that reason, we will use *part of speech* and *category*

interchangeably, keeping in mind that using the traditional term does not imply we accept the details of traditional classification uncritically. Instead, we will examine how these categories can be redefined to better reflect the way they actually work.

## Testing Category Membership

If we are going to do more than simply accept the traditional parts of speech uncritically, we need to establish some sort of theory of word categories, that is, a set of principles that will let us decide where the traditional categories work and where they need revision. Armed with this procedure, we will find that traditional grammars describe some categories that have no real existence in present-day Englishes. They also conflate other categories which are actually distinct.

Our basic procedure will be to look for elements that are grammatically distinct in English. In other words, we must find structural reasons to distinguish one item from another. For example, we can justify distinguishing verbs from nouns based on the relationships they enter into:

(7) Brown should denounce the need to memorize grammatical definitions.
(8) Brown's denunciation of the need to memorize grammatical definitions (was well-intentioned)


In example (7), *denounce* belongs to a category (verb) that can take an *-ed* inflection to indicate past time (for example, "Brown denounc**ed** it."). It can also follow an auxiliary verb (in this instance, *should*). It can also, in turn, be followed by

a noun phrase (*the need*) that functions as something called the direct object. (Don't worry if some of these terms are unfamiliar. We will cover them in the upcoming chapters.) One way to speak about these possibilities is to say that *denounce* can enter into a variety of structural relationships with other elements in a sentence. These relationships are not a matter of the word's meaning. Notice that a wide variety of different words can replace *denounce*. If we were to substitute them, the sentence's meaning would change entirely. Yet all those words appear in the same structural contexts.

The word *denunciation* in (8) enters into an entirely different series of relationships, even though its meaning is quite similar to that of *denounce*. It can be preceded by a definite article (*the*) or a noun phrase marked with the so-called "possessive" (*'s*), it can take a plural -*s* inflection, and it can be modified by an adjective (for example, "Brown's *quick* denunciation). If we try to make *denunciation* fit into any of the patterns that work for *denounce*, we get ungrammatical nonsense:

(8a) *Brown's denunciationed of the need to memorize grammatical definitions.
(8b) *Brown's can denunciation of the need to memorize grammatical definitions.
(8c) *Brown's denunciation the need to memorize grammatical definitions.

As a result, we say that *denunciation* belongs to a different category (noun).

We will use both procedures repeatedly both to explain

how we arrive at our categories and to figure out which category any particular word belongs to.

Another important point about word categories is that they exist within a hierarchy. That is, we will recognize both primary categories and subcategories. For example, we accept the primary category of noun, but not all nouns behave the same way. Words like *Gina* and *car* are both nouns and share properties such as the ability to appear as the principal word in a subject. But they also differ in the words that appear with them. *Car*, as long as it is singular, must appear with a word like *the* or *a*. *Gina*, on the other hand, cannot appear with these words:

(9) *Car is in the driveway.
(10) *The Gina was late for work.

We therefore say that car and Gina belong to the same primary category, but different subcategories.

## Lexical Categories

Contemporary linguistics describes some word categories differently from traditional grammar books, and introduces several new distinctions.

One distinction that is sometimes made is between *lexical categories* and *functional categories*.
Lexical categories contain the content words–nouns, verbs, adjectives, and adverbs. These are the words that carry the primary meaning of the sentence. Words that belong to functional categories–determiners, auxiliaries, prepositions, coordinators, and subordinators, for our purposes–carry little specific meaning of their own. Their

main purpose is to serve as the glue to hold the content words together. Such words belong to functional categories. Although this distinction is conceptually useful, it's not always easy to assign categories clearly to one group or the other. Prepositions, as we will see, have some lexical qualities and some functional qualities.

For that reason, we will not make too much of the lexical vs. functional distinction, though it's interesting to note that the lexical categories are where most of the change in a language's vocabulary over time happens. Instead, we will simply describe the primary categories. We will examine how these categories work in more detail as we learn more about sentence structure. For now, here's a brief overview.

## Nouns (N)

Although I have already tried to show why the traditional definition of a noun (person, place, or thing) is inadequate, now that we have come to define what nouns are, I am going to start with that definition anyway. Am I contradicting myself? Not really. Nouns do refer to people, places, and things, but that doesn't exhaust the extent of their reference. People, places, and things are prototypical nouns. If we're studying a new language, the category that we will call "noun" in that language will be the one that includes these core objects.[3] We will start with these core nouns, observe the patterns that they exhibit, and then use those patterns as a structural test for other words whose category membership may be less clear.

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3.  Although the claim is not entirely uncontroversial, most linguists believe that every human language distinguishes at a minimum between nouns and verbs.

Let's begin with a few examples of such core nouns: *teacher, house, car.*

All of these words use the same suffixes. They change form to distinguish singular from plural by adding *-s*:

One teacher, two teachers

One house, two houses

One car, two cars

They also take a different suffix that is traditionally called the *possessive* ('s for singular nouns, s' for plural ones). Note that in some cases, an alternative term for this form is the *genitive*.

the teacher's lesson plan

the house's roof

the car's engine

Nouns can also be formed from preexisting verbs, adjectives, other nouns by adding certain derivational suffixes, e.g., *-ment, -tion, -hood,* etc. So the presence of such a suffix is good evidence that the word you are looking at is a noun.

These morphological tests work for a wide variety of nouns, but not all. For example, there are some nouns that form the plural irregularly (e.g., *mouse/mice*), or show no difference in form at all (e.g., *sheep, deer,* etc.). Nevertheless, we still want to assign these words to the same category because in other respects they behave just like the more regular nouns.

Another set of tests looks at the context in which a word can appear in phrases or sentences. As was indicated above, nouns can appear in sentence structures such as the frame in (4), repeated here for convenience:

(4) She has no _____.

Nouns can also appear as the subjects of sentences:

(11) *Deprivation* is growing among the unemployed.

Nouns also follow certain function words known as **determiners** (see below), such as *the, a(n), my, that,* etc. Thus we can say *the enrollment,* but not *\*the enroll.*

In this course, we will take pronouns to be a subcategory of noun, for simplicity's sake. Pronouns are words like *he, she,* or *you* that let us cross-reference another entity somewhere else in the discourse or in the real world. Traditional grammars state that pronouns replace nouns, but it would be more accurate to say that they replace *noun phrases.*

(12a) [The airplane parked on the tarmac] appeared damaged.

(12b) *It* appeared damaged.

In (12b), the pronoun *it* does not replace just the word *airplane* of (12a); it replaces the entire string of words, *the airplane parked on the tarmac.* Replacing only *airplane* with a pronoun yields an ungrammatical sentence:

(12c) \*The it parked on the tarmac appeared damaged.

Pronouns serve the same functions in a sentence that nouns do, most notably they are the heads of noun phrases. They largely observe the same syntactic rules as nouns, for example subject-verb agreement. For these reasons, we will consider pronouns to be a special type of noun rather than an independent word category.

We will use the term **referent** for the entity to which the pronoun refers. The referent does not necessarily have to be named linguistically. For example, if you and I are standing on a street corner and observe an automobile weaving in and out of traffic at a high rate of speed, you might say to me, "He's driving recklessly." The context of the situation tells me that the referent for *he* is the car's driver without your needing to use that noun phrase. However, pronouns often do refer to other noun phrases,

and in this common situation those noun phrases are called **antecedents**.

Sometimes, we will need to note what pronoun refers to what antecedent. In this case, we will use a subscript notation. For example:

(13) Genevieve helped Albert$_j$ with his$_j$ physics homework.

In (13), the letter *j* indicates that the pronoun *his* refers to *Albert*. In other words, *j* serves as a co-referencing variable. We can use such subscripts to make assertions about particular interpretations of pronouns. For example:

(14) *Genevieve$_j$ made her$_j$ a sandwich.

We mark (14) as ungrammatical not because it has no sensible interpretation but because *her* cannot be understood to apply to *Genevieve*. If *her* referred to any 'her' other than Genevieve, the sentence would be acceptable.

Pronouns come in several varieties: Personal pronouns *I, you, he, she,* etc. usually refer to a previously mentioned noun phrase or to a clearly implied person. Reflexive pronouns *myself, yourself, themselves,* etc. most commonly refer to the subject of the clause they are in.

(15) The graduating seniors$_j$ threw themselves$_j$ a party.

Because of this requirement that reflexives refer to the subject, reflexive pronouns usually cannot appear in subject position

(16) *Himself went to the party.

For the same reason, transitive verbs with reflexives in the direct object cannot be made passive:[4]

(17a) Ron Howard cast himself in his own movie
(17b) *Himself was cast by Ron Howard in his own movie.

Additional types of pronouns:

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4. We'll learn about passives later, I promise.

Indefinite pronouns: *somebody, anyone, everything, nothing*, etc. don't refer to specific nouns.

Interrogative pronouns: *what, who,* or *whom*, replace a noun phrase in forming a question.

Relative pronouns: *who, whom, which, whose,* replace a noun phrase in a relative clause.

Interrogative and relative pronouns occur as parts of more complex structures, which we will study in a later chapter.

Finally, "possessive pronouns", which are forms like *my, your, our, his, her*, etc., *when they precede a noun*, will be treated as **determiners**, rather than as nouns.

(18a) Her car was on fire.

(18b) The car that was on fire was hers.

In (18a), 'her' is a determiner–it can be substituted with other determiners, like 'the'. In (18b), the possessive pronoun is in the object position, and is acting as a noun.

## Verbs (V)

In terms of their distribution, main verbs, lexical verbs, or simply 'verbs', are words that can appear after auxiliaries. In the frame sentence (5), repeated for convenience, *can* is the auxiliary:

(5) She can ____.

We will have more to say about auxiliaries later. For now, we can simply note that one test for verb status is whether it can fill in the blank in sentence (5).

Morphologically, verbs change form to distinguish tense, and, in the present tense, the third-person-singular from other persons and numbers. Thus we contrast *They walk*, the present tense, from *They walked*, the preterite (simple past tense), and *He/she/it walks* from *I/you/we/they walk*.

Verbs also take the suffix –*ing*, and can appear in another past-tense form, the *participle*, which we'll introduce in another chapter.

Note, however, that these morphological tests don't work for every verb. Just as there are some exceptions as to how nouns form the plural, there are some exceptions to how verbs form the preterite and some other forms. In terms of meaning, it is important to recall that defining verbs as 'action words' is not always reliable. In *Jane exists*, 'exists' is not what we would generally think of as an action. Thus, it's better to think of verbs as generally expressing the main situation, relationship, or action of a sentence (but other tests are better).

Verbs can be categorized in different ways; one of the main ones we will discuss later is the ways in which they act toward **objects** and other **predicative complements**. We will distinguish in another chapter between **linking** verbs, **intransitive** verbs, **monotransitive** verbs, **ditransitive** verbs, and **complex** verbs.

Finally, note that verbs often have phrasal relationships with preposition-like words that change the core meaning of the verb. Consider the 'receive' meaning of 'get' in (19a) and how it changes in (19b-d)–none of these have anything to do with receiving something! In these cases, we'll call 'out', 'up', and 'over' examples of another category, **particles**, which go together with verbs to make what are often called **phrasal verbs**.

(19a) I will **get** a fishing rod for my birthday.

(19b) I will **get out** a fishing rod when it's time.

(19c) I will **get up** to go fishing tomorrow.

(19d) I will **get over** the bad fishing trip I had eventually.

# Adjectives (Adj)

Adjectives typically specify characteristics of nouns, or they limit the application, as in "the *large* refund," "an *enthusiastic* participant," or "*purple* prose." Most often they appear before a noun, although they can also appear in their own phrases after certain verbs known as linking verbs, as in "Wilma looks *cheerful*." or "They were *happy*."

Morphologically, most adjectives are gradable. That is, they express the grammatical category known as **degree**. The basic form of the adjective, which expresses a quality, is known as the **positive degree**. To express a greater intensity of one of two items, the **comparative degree** is used, either by adding the suffix *–er* or with the word *more* and the basic adjective. To express the greatest intensity among three or more items, the **superlative degree** is used, either with *–est* or *most*.

Gradable adjectives can be tested by adding the word *very* in front of them. Thus

(20) She is very slow

(21) *Very fools waste time.

(22) *He very adores her.

Some adjectives, however, describe an all-or-nothing state, and aren't gradable. The *very* test sounds rather odd with these words, as in

(23a) ?They were very present at the assembly.

In such cases, the *very* test won't help us decide whether present is an adjective. Notice, however, that *present* does pass the other structural tests for an adjective given above. For example, it can appear after a linking verb like *were*:

(23b) They were present at the assembly.

# Adverbs (Adv)

In traditional grammar, *adverb* was a catch-all category for everything that was difficult to analyze. Unfortunately, this had the effect of making the category heterogeneous. Some words that are traditionally called adverbs show very different distributions from other words in the same category. In some cases, we will not categorize these words as adverbs at all. We will note such cases as they occur in later chapters. We will begin, however, with the most obvious cases.

Adverbs are characteristically used to modify verbs. That is, they perform the same function for verbs that adjectives do for nouns. And indeed, adjectives and adverbs are often closely related, but they do not appear in the same function:

|       | Modifying Nouns     | Modifying Verbs      |
| ----- | ------------------- | -------------------- |
| adj.  | new cars            | *They new drove.     |
| adv.  | *a suddenly change  | It changed suddenly. |

Many adverbs can also modify adjectives, and some can also modify words of other categories (except nouns), as well as complete phrases and clauses.

*verb modifier*: The pedestrian appeared *suddenly*.
*adj. modifier*: The *suddenly* hazardous situation took us by surprise.
*clause modifier*: *Suddenly*, the pedestrian stepped into the street.
*verb modifier*: I *almost* wrecked the car.
*adj. modifier*: His confusion was *almost* comical.
*adv. modifier*: She *almost* never misses a meeting.
*prepositional phrase modifier*: The situation was *almost* beyond repair.

(Note: if you're having trouble seeing why these adjectives and adverbs are modifying the things that I say they are, you might want to read the chapter on phrase structure, and then return to this section.)

Morphologically, many adverbs are formed from adjectives by adding the suffix *–ly*. Like adjectives, they are also frequently gradable, and can use the comparative and superlative. The *very* test also works for adverbs.

(24) She exercises very frequently.

## Secondary Categories

The remaining categories are called secondary not because they are unimportant but because they have many fewer members than the primary categories. There are tens of thousands of words in the primary categories but only a handful of words in the remaining categories. The membership of these categories does change, but much more slowly over time.

## Prepositions (P)

A **preposition** relates one unit in the sentence to something else in the sentence. Prepositions often express relations of space or time, or they mark various grammatical roles. Words like *in, to, over,* and *through* are prepositions. As their name implies, they precede something, usually a noun phrase. The phrase that follows a preposition is called the **object of a preposition**.

(25) in [the yard]

(26) throughout [the ages]

Prepositions are slightly different from the categories we

have already examined. They often have distinct meanings of their own, but many prepositions play a more purely functional role. Prepositions form a small, relatively closed set of words. There are only a few hundred prepositions in English, as opposed to tens of thousands of nouns, verbs, adjectives, or adverbs. It's easy to invent new nouns, verbs, adjectives, or adverbs. New prepositions, however, are added to the language only rarely.

Prepositions do not have inflectional endings, so we cannot apply morphological tests to prepositions. However, like adjectives, many prepositions are gradable. These prepositions can be preceded by degree words such as *right* or *straight*:

(27) She walked right into the wall.

Not every preposition is gradable, however. *Of* is a preposition, but it cannot be modified by *right/straight*.

(28) *The relaxed days right of summer were my favorite.

The ungradable prepositions have what are called grammaticalized uses. In other words, the preposition's meaning is not distinguishable from the grammatical construction in which it occurs. For example, compare the use of *by* in the following sentences:

(29a) His blind date stood by the fountain.

(30a) The report was completed by a committee of experts.

In (29a), *by* has an identifiable spatial meaning. This use is not grammaticalized. In (30a), however, *by* has no spatial meaning. Indeed, it's hard to say what independent meaning it has. Its function is grammatical: it specifies the following noun phrase (a committee of experts) as the actor in the sentence. Notice that (25a) is gradable, but (26a) is not:

(29b) His blind date stood right by the fountain.

(30b) *The report was completed right by a committee of experts.

As noted in the section on verbs, we will consider the particles that appear with phrasal verbs, like 'get **up**', as the same category and label (P) as prepositions for simplicity, while keeping in mind that they function quite differently (in that they don't take complements of their own).

# Determiners (D)

**Determiners** are words that appear before nouns and specify ideas such as definiteness and quantity. Traditional grammar books often lump determiners in with adjectives and pronouns, but we will treat them as a primary category. Determiners play an important role in noun phrases. For now we merely list the most common determiners, and some subcategories which may be familiar, including articles, demonstratives, quantifiers, and numerals. We will return to them in more detail when we look at noun phrase structure.

### Articles

The **definite article**, *the*, is used to introduce something that can be identified uniquely within the context of the utterance or of general knowledge. For that reason, the is typically used for "old" information. If I say "bring the chair," I assume you already know which chair I'm talking about.

The **indefinite article**, *a/an* is used for situations were the reference is not uniquely identifiable. If I say "bring a chair", I don't have any particular chair in mind.

### Demonstratives

The demonstratives are *this*, *that*, *these*, and *those*. Like definite articles, they refer to old information. But they also

point to specific things: *this book* or *those children*.[5] That "pointing" establishes a relative spatial relationship, which is reflected in the contrast between *this/these*, used for items that are close to the speaker, and *that/those*, used for items that are further away from the speaker, relatively speaking. Note that *this, that, these,* and *those* can also be used alone as pronouns, when they do not precede or introduce a noun.

## Quantifiers

Many determiners express a notion of *quantification*. That is they specify how much or how many of the head noun there are. Here's a list of some common quantifiers:

| | | | |
|---|---|---|---|
| all | any | both | each |
| either | enough | every | few |
| fewer | less | little | many |
| more | most | much | neither |
| no | none | several | some |
| sufficient | what | whatever | which |
| whichever | | | |

## Numerals

One kind of determiner that deserves separate attention is the numeral.[6] Numerals appear in one of two forms: **cardinal** (*one, two, three,* etc.) and **ordinal** (*first, second, third,* etc.). When cardinal numerals appear in front of a noun

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5.  The technical term for this pointing function is deixis.

6.  We use the term "numeral" in order to distinguish from linguistic number (singular/plural).

in order to quantify it (*two birds, four cats,* etc.) they are best treated as determiners. Ordinal numerals, on the other hand, might best be treated as adjectives that come after other determiners (*the first prize, our fifth date,* etc.) Numerals can also appear as independent nouns in their own right. We will return to this point when we examine the structure of noun phrases.

# Auxiliaries (Aux)

In most grammar books, auxiliaries are considered a special type of verb, but we will treat them as a separate category. It's important to note that auxiliaries do not behave like most other verbs. In particular, they fail most of the tests for verb-hood given here. For example, the frame sentence (5) cannot be filled in with another auxiliary.

(31) *She can might.[7]

What's relevant for now is that, while every sentence has to have a verb, auxiliaries are optional, only appear with (specifically, before) a main verb, and cannot substitute for a main verb. The words *be, do,* and *have* can sometimes function as auxiliary verbs, and sometimes function as main verbs. Other than these, there is one special subcategory of auxiliaries we'll deal with now.

**Modals**

Modal verbs or modals are words like *can, could, will, would, shall, should, may, might,* or *must.* These are special

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7. In some regional varieties of English, for example in North Carolina, two auxiliary verbs actually can appear together in the so-called double-modal construction, e.g., "I might could loan you the money." Such sentences, though, are ungrammatical for all the standard varieties of English.

because they do not have any other inflectional forms, like other verbs (and auxiliaries) do.

## Coordinators (Co) and Subordinators (Sub)

Traditional grammars typically have a category called the **conjunction** and distinguish between coordinating conjunctions and subordinating conjunctions. In point of fact, these two classes of words do not behave the same way at all, and so there is no good reason to think they are subtypes of a larger category. For that reason, we will treat these words as belonging to separate categories.

### Coordinators (Co)

Coordinators are words that join grammatically equal units together. The principal coordinators are *and, but, or,* and *nor.* A common mnemonic device some have learned is 'FANBOYS'–for, and, nor, but, or, yet, so. Note that *for* is often a preposition, and *yet* and *so* are often used in other ways; use of these three as coordinators is becoming less common in modern English.

### Subordinators (Sub)

Words whose function is to establish an unequal grammatical relationship, (e.g., *because, since, whether, if*).
(27) She asked me *whether* it was raining
Most subordinators can also function as other parts of speech: *to* can be prepositions, *that* can be a determiner, etc.), and so we will return to look at subordinators, and how to distinguish them from other parts of speech, more

closely in later chapters–particularly when we consider subordinate clauses.

## Interjections (Int)

Interjections are words like *oh, hey, ouch,* or *aha.* They stand apart from other parts of speech in that they do not combine with other words in larger syntactic structures. Their primary function is to express feeling rather than to make a proposition about something. Some words—particularly curses like *damn*—are primarily verbs but can function as interjections:

(32) Damn, I'm late for work again.

# Chapter 4. Tense, Main Verbs, and Auxiliary Verbs

*Matt Garley and Karl Hagen*

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## Tense, Main Verbs, and Auxiliary Verbs

Before we go into the structure of the verb phrase, or the clause, for that matter, we can start by establishing how important the verb is to the sentence (or main clause). Whether or not it contributes much *meaning* to the sentence, the main verb is really the key component, the foundation on which the entire sentence rests. Because the appearance of the main verb alongside auxiliary verbs is the basis of the verb phrase (which functions as the

predicate) and the predicate is the basis of the clause, it's important for us to be able to identify main and auxiliary verbs early on in our analysis of English sentences.

In a sentence like (1), there are two verbs, *has* and *eaten*, in the same phrase:

(1) Jonathan has eaten my sandwich

The verb *has* in this sentence is a member of a subset of verbs called *auxiliary verbs*.[1] The purpose of this chapter is to 1) examine the different forms main and auxiliary verbs appear in, i.e. the **verb paradigm**, explore the **auxiliary constructions** main and auxiliary verbs appear in, and particularly how these relate to the concept of **tense,** and how **tense** and **time** are distinct concepts.

## Tense

At some point in your schooling, you were almost certainly introduced to verb tenses. We'll develop a precise understanding of tense in a moment, but for now, think back to what you were taught. What is tense? How many different tenses can you remember learning for English? Take a moment to jot down what you can remember before continuing.

I have asked these questions of many students over the years. By far the most common answers are that tense has something to do with the time of the sentence and that there are three tenses: past, present, and future. Some people, perhaps remembering their foreign-language classes, will list more tenses, with names like *pluperfect* and so on. Some grammar books have long lists of inflections

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1. Grammar books designed for younger students often call auxiliary verbs "helping verbs."

of verbs with names like the *past perfect tense* (for example, "had played"), or the *future progressive tense* (for example, "will be playing").

If you never could keep all these straight, you are not alone. One reason you may have problems is that the story that most schoolbook grammars tell about tense is not particularly accurate. These books are frequently vague about just what tense is, and they implicitly lump together separate elements of the verb phrase into this single category. One consequence of this muddled pedagogy is that students come away with the sense that anything having to do with the verb should be called a tense. It is easy, for example, to find instances of journalists or other educated people talking about the "passive tense" (it's actually a voice, as we will see in a later chapter).[2]

Before I reveal how we will actually treat tense, I would like to step you through a short exercise that will show some of the problems with the traditional conception of tense. To begin, fill in the sentence "Marissa _____ her dog" with the form of the verb *walk* that is appropriate for each of the three primary tenses that you were taught: past, present, and future. Write these down so you will have something to refer to as you look at the next set of examples.

*Form used in the present tense*: _____

*Form used in the past tense*: _____

*Form used in the future tense*: _____

Pay attention in particular to what distinguishes one form of the verb from another. (Note that the form of the

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2.  As far as I know, no grammar book actually calls the passive voice a tense. The problem, in this instance, is not with the actual labels used but with the failure to teach how the overall system actually works in a way that students retain.

present-tense verb that you wrote could have been different if we had used a different subject, for example, *they*. This difference is separate from tense, and so to keep things simple, all of the examples that follow will use will employ similar subjects so that we only need to consider one form for each tense.)

Now consider the following sentences. For each one, look at the underlined verb. What tense does each one have? Don't be distracted by the meaning of the sentence. Just look at the form to answer this.

(2) My flight <u>leaves</u> at 10 pm.

(3) Marissa <u>walks</u> her dog each evening.

(4) Your mother tells me you <u>plan</u> to go to law school.

(5) Sherry will be sorry that she <u>missed</u> seeing you this evening.

(6) If he <u>studied</u>, he could pass the upcoming test.

Now look at the *time* of the action to which each verb refers. Do you see the problem?

In sentence (2), you may have been tempted to declare *leaves* a future-tense verb, but compare the form to our previous list. It is actually a present-tense form, although the sentence refers to a future event. In sentence (3), *walks* is a present-tense verb, but notice that the time it describes is not really now. This statement can be true even if the dog-walking is not occurring at the moment of the statement, for example if it's morning. Sentence (4) also contains a present-tense verb, *tells*, but the act of telling clearly took place before the statement, and so refers to past-time. In sentence (5), *missed* seems to be in the past tense, but notice that this event (the missing) is ongoing during the time that the sentence is being uttered. From the frame of the speaker, it occurs in the present time. In

sentence (6), the proposed action (studying), along with the test, lies in the future, but *studied* is a past-tense form.

What is going on here?

These examples illustrate that tense does not always equate simply with time. When we use the term *tense*, we are referring to a grammatical form. Time, however, is a semantic concept that can be expressed in ways other than a grammatical marking of the verb. In sentence (2), for example, the futurity of the action is conveyed not by the verb but by the prepositional phrase *at 10 pm*. Further, tense can be used, in extended senses, to convey meanings other than time. In sentence (6), the past tense marks not past time but the speaker's opinion that the subject is unlikely to actually study and that the situation is therefore a hypothetical one.

Once we appreciate this crucial distinction between form and meaning, we are ready to look at exactly what tense is. As we will define it, *tense* refers to a grammatical form, or system of forms, whose primary function is to refer to a point in time.

This definition of tense is narrower than the one typically given in schoolbooks. Note in particular that while pointing to a time is the *primary* function of tense, it is not the only function. Further, this function doesn't involve every possible aspect of time, only reference to basic points in time. As we will discover shortly, there are other features of a temporal situation that are conveyed with different means.

How many tenses does English have? By now, I hope I have convinced you to mistrust the simple explanations of the schoolbooks. Let's return to the examples of the basic tenses that we produced before:

Tense according to the schoolbooks:

| Tense | Example |
| --- | --- |
| Present | walks |
| Past | walked |
| Future | will walk |

Looking at these forms, the future seems very different. While the present and the past are formed **synthetically**, that is by means of an inflection, the future is formed **analytically**, that is by means of an auxiliary verb. By itself, that difference may not be decisive—the comparative degree of adjectives, for example, can be expressed either synthetically (*quieter*) or analytically (*more pleasant*)—but enough differences distinguish the traditional future tense from the present and past tense forms that it does not make much sense to lump them together.

First, in terms of grammatical structure, *will* is not unique. It operates like many other auxiliary verbs, verbs which are sometimes called *conditionals*, but which we will call **modal verbs**. Examples of other modal verbs are *can, may, should,* or *must*. These verbs will be the subject of the next section, but for now notice that each of these combines with another verb in exactly the same way: the auxiliary is followed by the bare form of the verb:

(7a) Marissa will walk her dog.

(7b) Marissa can walk her dog.

(7c) Marissa may walk her dog.

(7d) Marissa should walk her dog.

(7e) Marissa must walk her dog.

In terms of the semantics, there are various shades of meaning conveyed by the different modal verbs. Sentences 7a-e differ in the degrees of possibility or obligation that they express, but all of these sentences refer in some way

to an event that has not yet occurred. In other words, the situation is located in the future. Thus *will* is not unique in picking out a future time. Moreover, there are some contexts in which *will* is not the normal way we refer to a future action. For example, suppose you have plans to go to a party tomorrow, and a friend asks you to see a movie with her. Which response would be normal to decline that invitation?

(8a) Sorry, I will go to the party.

(8b) Sorry, I'm going to the party.

Sentence (8b), of course, would be the normal response. English speakers regularly use the second form to refer to future action when there is a definite plan. Indeed, if we think about the contexts in which (8a) might be acceptable, we can see that (8a) expresses more than just the future time of an event. It also conveys the speaker's firm determination. You might say it, for example, in response to someone who has told you that you should stay home and study. ("Sorry, I WILL go to the party.") This additional element, telling us something about the speaker's attitude in addition to the time, is frequently conveyed by other modal auxiliaries.

(9) She *must* have been drunk.

As in (8a), sentence (9) expresses a conclusion about the speaker's attitude or understanding of a situation. As we will see shortly, expressing this sort of meaning is one of the common functions of modal auxiliaries.

Finally, and perhaps most strikingly, in sentences with multiple verbs, *will* appears in contexts with present-tense verbs. Conversely, the closely related *would* appears in contexts with past-tense verbs.

(10a) Scientists *predict* that the volcano, which *has* been inactive for many years, will erupt at any moment.

(10b) Scientists *predicted* that the volcano, which *had* been inactive for many years, would erupt at any moment.

Notice that the highlighted verbs in (10a) are present tense, and the highlighted verbs in (10b) are past tense. Moreover, we cannot substitute *would* for *will* or vice versa.

(10c) *Scientists *predict* that the volcano, which *has* been inactive for many years, would erupt at any moment.
(10d) *Scientists *predicted* that the volcano, which *had* been inactive for many years, will erupt at any moment.

Sentences (10a) and (10b) illustrate the tendency of tense consistency. In other words, unless there is some overriding reason to switch tenses, the basic tense of a sentence will remain consistent throughout. In short, *will* is consistent with present-tense verbs and inconsistent with past-tense verbs.

Taken together, all these observations lead to a surprising conclusion: **English does not have a future tense**. English tenses are expressed by inflections on the verb. That means that English has only two tenses: present and past. *Will* is an auxiliary and part of a different verbal system, that of mood. *Will* does have a tense, but as examples 10a-d show, it is a present-tense verb.

This conclusion differs dramatically from what is typically taught in schoolbook grammars, but it is not new-fangled linguistics. The two-tense nature of English, and of other Germanic languages,[3] was first recognized in the early nineteenth century, and is currently the standard account in the reference works used by professional linguists. That so many books used in primary and

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3. English is classified as a Germanic language because, despite heavy later borrowings of French, Latin, and Greek words, its core words and grammar are most closely related to languages like German, Dutch, Swedish, etc., all of which belong to the Germanic family of languages.

secondary education still cling to an outdated description is scandalous but unfortunately typical of the disconnect between the authors of such books and linguistic scholarship.

## What do you mean there's no future tense?

Some people have trouble accepting that English lacks a future tense. If you are in that group, there are several points to keep in mind. First, remember that tense is not the same as time. To say that English lacks a future tense does not mean that it has no way of referring to the future. It has many ways to do that. In English, the future is a time-reference, but not a tense. Second, English may lack a future tense, but other languages do have one, particularly languages you are likely to have studied in school, such as Spanish, French, or Latin. Indeed, the tense system of Latin is partly at fault for the way that tense is taught today. When the early grammarians sat down to write the first grammars of English, they took Latin as the model, and simply filled in the categories that worked for Latin with their nearest English equivalents. It should not be surprising that different languages should vary in how many tenses they have. After all, one of the reason that languages are different is because they follow different sets of rules. There is nothing logically necessary about dividing time up into past, present, and future, and even given a three-fold distinction, there is no logical requirement that each distinction must be expressed through tense.

# The Verb Paradigm

Main and Aux verbs (except modals) come in different forms depending on how they're used. They can be *regular* (where each form has the expected/usual ending) or *irregular.* We'll treat verbs as having *primary* or *tensed* forms, and *secondary* or *tenseless* forms.

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*Primary verb forms:*

|  |  | Regular |
| --- | --- | --- |
| example | Irregular example | |
| plain present ("I/you/we/they ____ everyday") | | |
| walk | fly | |
| 3s present ("John/he/she/it ____ everyday") | | walk**s** |
| | flies | |
| preterite ("John ____ yesterday") | | walk**ed** |
| | flew | |

---

*Secondary verb forms:*

| plain form ("John will ____") | | walk |
| --- | --- | --- |
| | fly | |

gerund    ("John is ____ right now")                          walk**ing**
        flying


participle ("John has ____")                                  walk**ed**
            flown

Here, I've selected the three main verbs that also function as Aux, since they're very common irregular verbs.

### Verb Paradigm for 'HAVE'

| Plain present | **have** | **have** | Plain form |
| 3s present | **has** | **having** | Gerund |
| Preterite | **had** | **had** | Participle |

### Verb Paradigm for 'DO'

| Plain present | **do** | **do** |
| 3s present | **does** | **doing** |
| Preterite | **did** | **done** |

| Verb Paradigm for 'BE' | | | |
|---|---|---|---|
| Plain present | **am/ are** | **be** | Plain form |
| 3s present | **is** | **being** | Gerund |
| Preterite | **was/ were** | **been** | Participle |

You might notice that BE has eight different forms; it's the most common verb in English and the only one that has more than six, so we're not going to make up extra forms for it (you could technically say it has a 1s present (am), a plain present (are), a 3s present (is), a singular preterite (was), and a plural preterite (were). It's easier to remember that it has a bit more person and number agreement than other verbs. 'Be' acts special in other ways too—in terms of yes/no questions and other instances of Subject/Aux inversion, it moves like an auxiliary verb, even if it's a main verb. (Ex. "Was I fishing?" vs. "*Did I be fishing?"; compare "*Had I a car?" vs. "Did I have a car?")

## Auxiliary Verbs & Auxiliary Constructions

In a simple auxiliary construction, an Aux is paired with a main verb (or another Aux) in a certain form. The Aux carries the grammatical tense for the clause, while the second verb occurs in a secondary form. In complex auxiliary constructions with more than one auxiliary, the first Aux is a tensed primary form.

**1) Mood and modal auxiliaries**

In the previous section, I briefly introduced you to the **modal auxiliaries** when I argued that *will* does not constitute a separate tense marker. To understand the function of modal auxiliaries, you need to know two related terms: **modality** and **mood**.

*Modality* refers to a set of related concepts primarily involving the attitude of the speaker of a sentence towards the reality of a particular assertion. What exactly that means is complicated and best illustrated with an example:

(11) Tad programs computers for a living.

(12) Tad must program computers for a living.

In sentence (11), the speaker asserts the truth of a proposition. In (12), by contrast, the speaker qualifies the proposition. The situation is presented not as one the speaker knows directly but as one the speaker has inferred. In other words, in (12), *must* indicates something about the speaker's mental state. These sentences, therefore, contrast in their modality.

*Mood* refers to a grammatical system that is primarily used to convey modality. The difference between mood and modality is parallel to the difference between tense and time. Like time, modality is a semantic concept; like tense, mood is a grammatical realization of a concept. For the most part, English expresses mood analytically, through a system of modal auxiliaries.[4] As with tense, mood does not always correspond in a simple fashion with modality. One modal verb can express several different modalities, depending on the context. And just as time can be

---

4.   Exceptions to the analytical nature of English mood are the constructions traditionally called the "subjunctive", which are marked on the verb itself. They play a fairly small role in the grammar of English, but are more prominent in languages like Spanish, French, or Latin.

expressed in different parts of a sentence, for example by prepositional phrases, modality can be indicated with things other than auxiliary verbs:

(13) I heard his *supposed* apology.

In sentence (13) the adjective *supposed* expresses the speaker's conclusion that the apology is not a valid one, for example because it lacks sincerity. Words such as *supposed*, then, express modality, but not mood.

Sentence (12a) represents the default situation, one without a modal verb, in which the speaker simply indicates that something is true. This unmarked situation is called the **indicative** mood, although since this is the ordinary case, we usually don't mention it unless we're contrasting it with another mood.

In some grammar books, the presence of a modal auxiliary is said to mark the *conditional* mood. This label reflects the fact that modal auxiliaries commonly appear in sentences that express a condition:

(14) If you build it, they will come.

However, the label *conditional* is not ideal. There are many other situations in which modal auxiliaries appear other than the conditional structure. Further, many conditional sentences do not use modal auxiliaries:

(15) If he got a ticket to the concert, he was lucky.

Because modal auxiliaries express a variety of different modalities, we will not try to lump them all into a single mood. Instead, we will simply call such verb phrases modal, and if we need to distinguish among them, we will do so by their meaning.

### Characteristics of modal auxiliaries

There are a small number of modal auxiliaries, and they display distinct features that set them apart from other auxiliary verbs.

*The Principal Modal Auxiliaries:*

| Present Tense | (former) Past Tense |
| --- | --- |
| can | could |
| may | might |
| must | — |
| ought | — |
| shall | should |
| will | would |

This set of verbs differs from other auxiliaries in the following ways:

- They do not agree in the third-person singular, as do other auxiliaries and lexical verbs. (16) *She cans play the piano beautifully.

- They are followed by a bare infinitive form of another verb. Most other verbs use the infinitive with *to*. *Ought* is an exception to this rule. It does require a *to*-infinitive but otherwise behaves like other modal verbs. (17a) *They must to work on the project. (17b) They want to work on the project. (17c) They ought to work on the project.

- They have no non-finite forms (present participle, past participle or infinitive). As a consequence, they cannot appear in places in the verb phrase where one of these forms would be required: (18) *Robertson was shoulding here tonight. (19) *The Senate has mayed ignore its own rules. (20) *I would like to will take you out to dinner.

A different way putting this last point would be to say that all the modal verbs have an inherent tense, as indicated in the table above. That table is organized in two columns to show you the relationship between present and past tense forms. In other words, *would* is the past-tense of *will, could* the past tense of *can*, etc. This used to be more true than it is–another way to think of this is that these used to be present and past tense forms, but have since scattered into a number of distinct present tense forms.

---

### Modal Construction

This construction is used when grammatical mood (the change in meaning expressed by the modal verb) is applied to a main verb.

Modal Aux (only one form)    +    Plain Form V

**might                    +    fly**

"John might fly"

---

**2) Progressive constructions**

Consider the difference between the following sentences:

(33a) Cerise *worked* efficiently

(33b) Cerise *was working* efficiently

Sentence 33a, which uses the simple past tense, refers in general to a completed action. Sentence 33b refers to the

action as being in progress at some particular time. The construction illustrated in 33b is known as the **progressive**. It is formed with a form of the verb BE and a form of verb ending in *-ing*. Although some schoolbook grammars call this construction a tense, that label is not accurate. Notice that 33a and 33b do not make a distinction in the time of the event. They could well describe the same action. The sentences differ in how they view the action's internal structure, a feature of language known as **aspectuality**. So instead of speaking of a "progressive tense," we will talk of a "progressive aspect."

---

### Progressive Construction

Progressive construction: this happens when the main verb is or was a situation in progress. There is a present and past progressive.

Progressive 'be' Aux (primary form)    +    Gerund V

**am/are/is/was/were** + **flying**

"John is flying"

---

A form of the verb ending in *-ing* is traditionally called a **gerund,** a *present participle, or a gerund-participle*. In this course, we'll stick with *gerund,* to avoid confusion (as it does not carry tense, and there's another form we call the *participle*).

(36) Reaching the summit of the mountain, Bob let out a shout of triumph.

In the example above, the act of reaching the summit does not occur in the present. It occurs simultaneously with the action of shouting, which is in the past tense. To form a present participle, all you need to do is take the base form of the verb and add –ing: spend + -ing = spending be + -ing = being make + -ing = making As the final example shows, there may be a minor spelling change, but that should not obscure the basic regularity of the whole process. Gerunds are completely regular in English. Every verb forms it exactly the same way, even the so-called irregular ones. Although every present participle ends in *-ing*, not every word that ends in *-ing* is a present participle:

(37) The painting on the wall is a copy of a Rembrandt. (Noun) (38) The host was charming to her guests. (Adjective)

(39) Veronica was charming her guests. (Participle)

While *painting* in the first sentence is clearly a noun (among other things, it follows a determiner), the other two may need glossing. In the second sentence, *charming* is an adjective. It denotes a quality of the host, and thus the verb is simply *was*. In the final example, Veronica is doing something to her audience; i.e., charm is a transitive verb. Notice that while you can add the degree adverb very to the adjective in (38), you cannot do so to the participle in (39):

(38b) The host was very charming to her guests.

(39b) *Veronica was very charming her guests.

**Meaning and Use of the Progressive**

The progressive is most commonly used to indicate a temporary condition, namely that: 1. the event takes time to occur, rather than happening all at once; 2. the event lasts

for a limited time. With some verbs, the progressive shows that the event is not necessarily complete:

(40) *Simple past:* I read Margaret Atwood's latest novel yesterday.

(41) *Past progressive:* I was reading Margaret Atwood's latest novel yesterday.

Because progressives specify a block of time, they are frequently used for actions that overlap some other point in time:

(42) When Mark came home he found that his girlfriend was throwing all his belongings out of the window.

Because the simple present often implies habitual action, the present progressive is typically used to refer to an individual event that has a present time referent:

(43a) What does Mark do over there in the corner?

(43b) What is Mark doing over there in the corner?

Sentence 43a only makes sense if Mark performs some action regularly in the corner. For this reason, a number of ESL textbooks call the present progressive the "present tense," a potential source of confusion for ESL learners. Because the progressive stresses a temporary state, it generally cannot be used with verbs that describe a permanent quality or state of being:

(44) *He is knowing English very well.

(45) *She is being from Guatemala.

(46) *Norma is having red hair.

The progressive can be used with some state verbs to imply a temporary state. In the a-versions of the sentences below, the situation is permanent, where the b-version implies that the state has a finite duration. Simple present:

(47a) The Lees live in Kwangju.

(48a) Bart is a brat.

Present progressive:

(47b) The Lees are living in Kwangju this summer.

(48b) Bart is being a brat.

### 3) Perfect construction

Another construction which has to do with aspect (rather than mood or tense) is the *perfect*, sometimes called the complex past tense. This form pairs the auxiliary verb 'have' with another verb or auxiliary in the preterite.

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*Perfect Construction*

This happens when the main verb happened before the present or before a past event. There is a present and a past perfect (both express past time)

Perfect 'have' Aux (primary form)    +    Past Participle V

**have/has/had    +    flown**

"John has flown"

---

### 4) Dummy construction

The dummy construction, which we will explore more in the chapter on movement, involves the pairing of the auxiliary verb 'do' with another verb or auxiliary in the plain form.

> *Dummy construction*
>
> This happens in 3 cases, when there is not already an Aux verb:
>
> 1) when a negative particle ('not') is applied to a sentence,
>
> 2) in a yes-no question, and
>
> 3) to emphasize the truth of the sentence. 'do' fills in as the 'dummy Aux'.
>
> Dummy 'do' Aux (primary form) +    Plain form V
>
> **do/does/did    +    fly**
>
> "did John fly?" (yes/no questions switch the position of the subject and the Aux)
>
> "John did (not) fly"

## 5) Passive construction

This switches the role of the direct object (the thing getting verbed) to the subject position, so it functions as the grammatical subject. Passive sentences use a primary form of 'be' for the Aux verb.

Passive 'be' Aux (primary form)      +      Past participle V

Aux      +      V

**am/are/is/was/were      +      flown**

"John was flown (by the pilot) (to LA)"

**Another construction to look for:**

This is not technically an Aux construction, but it is related. The **infinitive form** of the verb is used in certain cases, essentially creating a subordinate clause without a subordinator. For more, see the chapter on subordinate clauses.

The infinitive form of the verb is 'to V', with the V in plain form. We label the 'to' a preposition/particle, mainly so we don't have to come up with another category

V (main clause)      P V (subordinate clause, beginning before 'to')

John wanted **to fly**

Mary liked **to fish**

The infinitive is also used in some ways like the gerund form, as a subject or object:

**To succeed** at this exam, you should study well.

I'm going **to memorize** this book in order **to win** at poker.

5

# Chapter 5. Analyzing Sentences

**Syntax** concerns the way that words are arranged into larger units. That is, words are the basic units—the building blocks—of syntactic analysis. The largest unit that syntactic analysis usually considers is the sentence. For this reason, syntax is often equated with the study of sentence structure, even though the things we analyze may not always be complete sentences. Language, of course, rarely consists merely of isolated sentences. We string sentences together into larger units—paragraphs, essays, books. When we spend a great deal of time focused on sentence-level analysis, as we will in the following chapters, it's easy to lose sight of the larger purposes of syntactic study. So before we plunge into the forest, it's worth considering why we should spend so much effort on the task.

Some people—and I count myself among them—find that syntax has its own inherent fascination. I won't hold it against you, however, if you're not one of those people. There are still many good reasons to learn something about syntax. Writing in any sort of formal context—a college paper, a memo at work, or a newspaper article—requires some knowledge of syntax. To understand the conventional rules for sentence punctuation, for example, you must first understand clause and phrase structure. Beyond mere mechanics, a thorough understanding of syntax also gives you a way to take control of your own writing. When you understand how sentences are put together, you will be able to analyze your own writing and understand the structures that you have been using intuitively. You will also be able to see what other options are available to you, how it might otherwise be done. Those who write for a living or who help others with their written expression—teachers, editors, etc.—have an even greater need to know how to analyze syntax.

When we analyze a sentence, we take it apart to determine what function each unit in the sentence has. This process is known as **parsing** a sentence. You can probably do some basic parsing already, even if you have never heard of the term. For example, if you can identify the subject of a sentence, you have analyzed the sentence and identified the role of one important item in it. Congratulations, you have just parsed a sentence, although not completely.

Over the next ten chapters, we will develop a progressively more detailed account of English syntax. As we begin our study, you should be aware that syntax is an interrelated system. As a result, learning how to analyze it can be challenging because to understand one part you

often need to know about something else. Occasionally we will have to introduce a term before defining it completely. In these cases, you may find it helpful to reread earlier sections after you understand the concept. We start with relatively general points and refine our account as we learn more about the various components of grammar. As our account grows more detailed, we will be able to analyze more and more complex sentences. From time to time, this added complexity will force us to refine our account when our first approximation turns out to be inadequate. Although it may seem more convenient to work from the beginning with a single "correct" system, that method is actually impractical. If we did so, we would drown in detail before understanding the basics.

The chapters that follow do contain many details, but they will not be exhaustive. No book can give a complete account of something as flexible and multifaceted as a human language. Even more important than all the terminology and diagrams that we use to describe syntactic structure are the basic principles that will let us think through problems on our own. When we turn to examine real-world language, as opposed to the deliberately controlled sentences of grammar books, we must understand the principles that underlie grammatical structure and apply our knowledge.

## Constituency

If we look at the components of a sentence, we can say that a sentence consists of a string of words. But if we look more closely, it's easy to see that the words aren't all equal. Instead, they occur in groups. Consider the famous opening sentence of Leo Tolstoy's *Anna Karenina*:

(1) All happy families resemble one another, but each unhappy family is unhappy in its own way.

It's not very helpful to think of the individual words in isolation. What, for example, is the relationship between *each* and *resemble*? In fact, they don't have a direct relationship. They are more closely related to other words in the sentence than they are to each other. We can appreciate some of this structure by dividing the sentence into some of its component parts.

First, we can see that this sentence breaks down into two halves:

| a: | All happy families resemble one another, |
|---|---|
| b: | but each unhappy family is unhappy in its own way. |

And in each of these parts, we can identify smaller units, for example[1]

| a: | | [All happy families] | resemble | [one another], |
|---|---|---|---|---|
| b: | but | [each unhappy family] | is unhappy | [in its own way]. |

How do we know that these words I have put in brackets are in fact units? In a variety of ways. For example, we can substitute a single pronoun *they* for "all happy families" or *it* for "each unhappy family." And "in its own way" could be the answer to the question "how is each unhappy family unhappy?"

These units are **constituents** in the sentence. A constituent is any word or group of words that functions together as an entity. Most rules of syntax do not, in fact, apply to individual words but to larger constituents. There is no limit, in principle, to the size of a constituent. It may be one or two words, or it may be hundreds of words long.

At its heart, grammatical analysis involves deciding what the constituents are in a sentence. Syntax consists of the rules by which different constituents relate to one another, so constituency is the central issue in grammatical analysis, and in interpreting sentences in general. The most important constituents we'll be working with are phrases, clauses, and sentences.

Notes

[1] This is a very brief and informal analysis, and we have only singled out a few of the constituents in this sentence. In other words, don't think that this analysis is anywhere near complete.

# Phrases

The constituent that we will see most is the **phrase**. A phrase consists of a single main word, called the **head** of the phrase, and other words that modify or give grammatical information about the head. These other words in the phrase are called the phrase's **attributes**. Informally, we might say that the head word is the main idea of the phrase.

(2) Russia's proposal at the conference

The phrase in example (2) is talking about a kind of proposal. *Russia's* and *at the conference* tell us what specific proposal we're talking about. *Proposal,* therefore is the head word.[1]

The lexical category of the phrase's head gives its name to phrase. Thus a noun is the head of a noun phrase (abbreviated NP), a verb the head of a verb phrase (VP), and so forth. Since *proposal* is a noun, (2) is a noun phrase.

Other Examples:

| (3a) | baked him a cake | Verb Phrase (VP) |
|------|------------------|------------------|
| (3b) | fond of pecans | Adjective Phrase (AdjP) |
| (3c) | very quickly | Adverb Phrase (AdvP) |
| (3d) | to the lighthouse | Prepositional Phrase (PP) |

Apart from simply being a convenient way to name phrases, the relationship between the head word and the phrase type captures a significant fact of syntax: the category of the head word plays an important role in determining where in the sentence the phrase can go, as well as a variety of grammatical rules such as agreement between subject and verb.

(4) {The [contract] between the boards of the two companies} [was] nullified by regulators.

For example, in sentence (4), *contract* is the head word of the NP which is the subject. The whole subject, therefore is singular, and agrees with the verb *was*, despite the two plural nouns (*boards* and *companies*) which are closer to the verb in terms of linear order, but which are actually buried in prepositional phrases.[2]

This example also illustrates another important point: phrase structure is hierarchical. That is, phrases can nest within phrases to any level of complexity. Thus the subject of (4), "the agreement between the boards of the two companies," contains two prepositional phrases, each of which itself contains a noun phrase. We can show this relationship in a diagram:

```
                    NP
                  /  \
                 /    PP
                /    /  \
               /    /    NP
              /    /    /  \
             /    /    /    PP
            /    /    /    /  \
           /    /    /    /    NP
          /    /    /    /   /‾‾‾\
       Det   N    P   Det  N  P
the agreement between the boards of the two companies
```
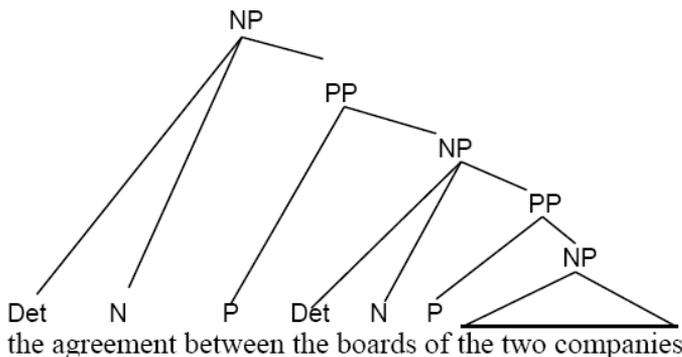
Take a moment to study this diagram. We will refine it
later with additional details, but it's important that you
recognize what information it's trying to communicate. It
shows that the whole noun phrase contains three parts:
a determiner, *the*, the head noun, *agreement*, and a
prepositional phrase, *between the boards of the two companies*.
In turn, that prepositional phrase consists of its head word,
*between* and a noun phrase, *the boards of the two companies*.
That noun phrase contains yet another prepositional
phrase, *of the two companies*, which contains its own noun
phrase, *the two companies*. That's what we mean when we
say that phrase structure is hierarchical: one phrase can
contain another phrase inside it.

Viewed this way, even the most elaborate sentence can
always be broken down into a handful of relatively simple
patterns that repeat over and over.

One final note on phrases: in ordinary, non-technical
usage, the word *phrase* means "more than one word." Thus
you will sometimes encounter books that use the
expression "word or phrase" to explain concepts like the
subject. As we have defined phrases here, however, that
expression is redundant. Because the attributes of a phrase
are often optional, it is possible to have a phrase that
consists of a single word.

(5) Computers intimidate many people.

(6) The young man was naïve.

In sentence (5), *computers* is a noun in a phrase with no attributes. It is a noun phrase all by itself. In sentence (6), *naïve* is a one-word adjective phrase. Treating these constituents as phrases, and not just individual words, allows us to account for many aspects of grammar in a simpler and more consistent fashion than if we treated them differently.

Notes

[1] This semantic test works reasonably well for prototypical cases, but be careful. There are many cases where the idea of the phrase won't really match the structural head. In other words, this notional definition of the head is meant to get you started with the easy cases, but it's only a rough guide. As you look at the examples that follow, pay attention to the structural patterns first, and meaning second.

[2] We are, of course, speaking of Standard English when we refer to subject-verb agreement rules. Some people do from time to time operate by a principle of attraction, making the verb agree with the nearest noun rather than the head noun of the whole phrase.

## Form and Function

Labels like NP, VP, etc, tell us the structural **form** of a constituent. Form alone, however, does not tell us everything about how a constituent works in the sentence. We must also consider its **function**.

(7) Her dog chases rabbits.

For example, *her dog* and *rabbits* in (7) are both noun phrases, but they have different functions in the sentence.

Although we haven't yet specified these functional roles, we can already see that each noun phrase has a different role in the sentence. The dog is doing the chasing, and the rabbits are being chased. The role of *her dog* is probably already familiar to you: it serves as the subject of this sentence. *Rabbits* plays a role known as the direct object, which we will study in the next chapter.

(8a) *His happiness* was evident.

(8b) *That he was happy* was evident.

Although subjects are typically noun phrases, they need not be. The italicized constituents in (8a) and (8b) are both subjects, but these two subjects are realized by different forms. The first is a noun phrase while the second is a **clause** (another term we're about to get to). In other words, just as the same form can serve different functions, the same function can have different forms.

(9) *Shelly* wrote a short story.

(10) *The baseball player* underwent elbow surgery.

If we consider constituents that are italicized in (9) and (10) above, we can see that they both have the same form (NP) and that they are both subjects, but in another way their functions are different. *Shelly* in (9) plays the role of the **actor**; she performs an action. *The baseball player*, however, is not the actor in (10); the surgery is performed upon him. He plays the role of the experiencer, commonly called the **patient**. (That's the general term, and not just because this particular sentence is about a medical procedure.)

Notice that in discussing these roles, we are invoking the meaning of the sentence. They are, in other words, **semantic roles**, and they are not the same thing as **grammatical roles** like subject and direct object. Grammatical roles are defined by structural relationships

within the sentence, semantic roles by relationships of meaning.

Keep in mind these distinctions. The form of a constituent, its grammatical function, and its semantic function, do not exist in one-to-one relationships. We will see many instances as we proceed where there are prototypical relationships. For example, subjects prototypically are NPs and actors. But as soon as you start to generalize and assume, for example, that subjects are always actors, you will get into trouble. You will save yourself a great deal of confusion if you distinguish form, grammatical function and semantic function carefully. As we proceed, take note of when we are discussing form and when we are discussing function.

## Clauses

A **clause** is a constituent consisting of two parts: a **subject** and a **predicate**. The concepts of subject and predicate are probably already familiar to you from your earlier schooling. In terms of meaning, we can say that the subject is the part of the clause about which something is asserted, and the predicate makes that assertion. These definitions are vague, and eventually we will need to be more precise. We will describe a clause in terms of structure once we're better able to describe how that structure works.

(11)

Clause

NP: subject    VP: predicate

[George] [seems quite relieved].
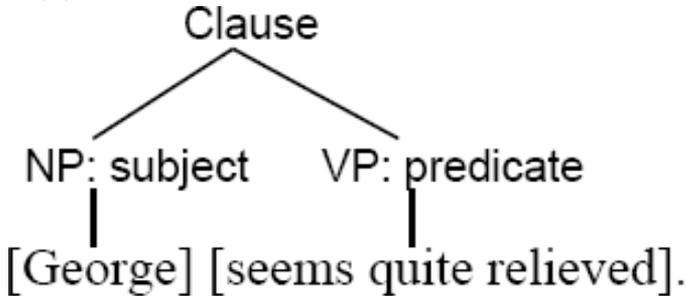
Subject and predicate are both grammatical functions. The predicate is realized by a verb phrase, and in the most common case, the subject is realized by a noun phrase. Notice that in the diagram above, we indicate both the grammatical form (the phrase type) and the function. The two are separated by a colon. Thus our notation follows the pattern *form: function*.[1]

One important point to note about subjects is that they frequently consist of more than one word.

(12)

Clause

NP: subject    VP: predicate

[The senator from California] [opposed the nomination].
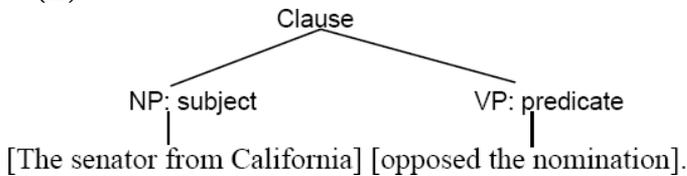
Many students are taught in grade school to identify the word *senator* alone as the subject. However, notice that *senator* is merely the head noun of the subject. The determiner *the* and the prepositional phrase *from California* are also part of the subject. In other words, subjects and predicates, along with other grammatical functions we will encounter later, are functions of phrases, not of individual words. As we noted above, however, those phrases may consist of only one word from time to time.

Notes

[1] Some theories of grammar do not mark functions as a matter of principal. Such theories attempt to give the most parsimonious account possible, and in this way of looking at things, grammatical roles such as subject are predictable from the structure. Although it may be redundant to mark such roles, we do so here for pedagogical reasons. We are primarily interested in describing all the relevant grammatical features in a way that is relatively easy to interpret, and to that end, we will tolerate a certain amount of redundancy.

## Sentences

Traditional grammar books, especially in their early chapters, often give the definition for the clause that we used in the previous section as the definition for a sentence. That simplification works for simple sentences, which often consist of only a single clause, but will not hold up under scrutiny:

(13a) George seems quite relieved.

(13b) It's obvious George seems quite relieved.

(13c) George seems quite relieved, but his brother remains uneasy.

In each example, *George seems quite relieved* is a clause. But only in (13a) is the clause equivalent to the sentence. In (13b), the clause is embedded into a larger sentence. It is known as a *subordinate clause*. In example (13c), the clause is linked by coordination to another clause, but neither one is contained inside the other. In the next few chapters, we will be dealing with simple, one-clause sentences like (13a), but it's important to keep in mind that real sentences frequently contain more than one clause. We will return to

multi-clause sentences after developing an understanding of basic clauses.

Another understanding of the sentence commonly found in traditional grammars defines a sentence to be a group of words that expresses a complete thought. Like the notional definitions of parts of speech, though, this leaves much to be desired. How can (13a) count as a complete thought while the identical string of words in (13b) and (13c) do not? How do we tell what counts as a complete thought? The more we think about it, the emptier this definition appears.

(14a) The founding of the college by Leland Stanford.
(14b) Leland Stanford founded the college.

Most people would have no problem saying that (14b) is a sentence while (14a) is not, but do they not contain all the same information? And why do we even think that (14a) is complete? If this sentence appeared in a larger essay, would it not be reasonable to claim that the whole essay expresses the writer's complete thought, and that this sentence is just a fragment of that thought? The traditional definition relies on a preexisting intuition of what constitutes a sentence. In other words, it takes for granted that we understand what it means to be complete without ever actually defining completeness.

For the moment, we will define the sentence negatively and say that it consists of at least one clause that is not contained in a larger grammatical unit. That is, if we look at texts that contain multiple sentences, the only relationship among sentences is one of simple sequence, as sentences are placed one after another.[1] Note that there are additional restrictions on what is and is not a sentence, but they will be easier to define after we have studied more types of phrases and clauses.

Notes

[1] We are not considering here the "orthographic" sentence—that is a string of words that begins with a capital letter and ends with a period, question mark, or exclamation point. While this often, especially in formal writing, aligns with syntactic sentences, the two do not necessarily coincide.

# Constituency Tests

William Powell: So I'm a hero … I was shot twice in the Tribune.
Myrna Loy: I read where you were shot five times in the Tabloids.
Powell: It's not true … he didn't come anywhere near my Tabloids."
—From "The Thin Man"

Many jokes, such as the banter between William Powell and Myrna Loy above, depend on an ambiguity in the sentence structure. Loy means that she read the story in the Tabloids, but Powell plays on the idea that he was shot in the Tabloids, and therefore that the tabloids are a body part. In effect, Powell reanalyzes the original statement in order to make his joke. Such ambiguities are frequent in all sorts of language, not just jokes.

(15) The Red Cross evacuated the refugees from Sudan.

This sentence can be interpreted as saying either that the refugees were evacuated from Sudan or that they were from Sudan. You may be predisposed to read this sentence with the first interpretation. In fact, the second version may seem as if it means the same thing. But consider sentence (15) in the following context:

After Hurricane Katrina struck the New Orleans, Maria Veracruz, a long-time worker for the Red Cross, experienced a feeling of deja vu. When she arrived in the stricken city, she saw faces that she had encountered only six months before on the dusty plains of East Africa. With full appreciation of the irony, the Red Cross evacuated the refugees from Sudan for a second time.

With this larger context, we are now primed to read the sentence according to the second grouping. But whichever interpretation we apply to (15), it's important to notice that our interpretation is reflected in the constituency of the items in the sentence. We can show the structure of each interpretation visually by means of diagrams:



The Red Cross evacuated the refugees from Sudan.



The Red Cross evacuated the refugees from Sudan.
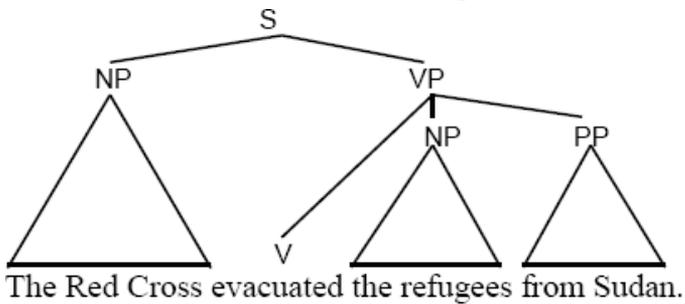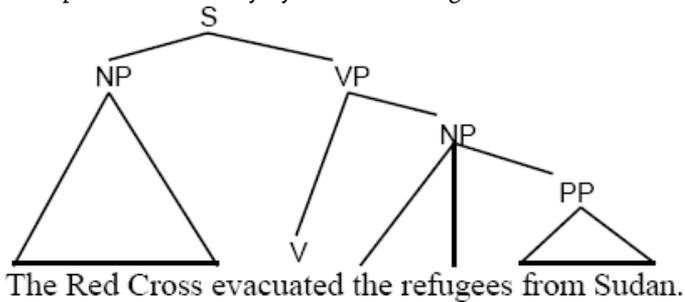
The first diagram shows a line extending from the prepositional phrase (PP) to the noun phrase (NP),

indicating that the prepositional phrase is part of (i.e., a constituent of) the noun phrase. This grouping reflects the second interpretation above. Notice that not only does it imply a particular meaning—the refugees are originally from Sudan—but it also indicates that the complete string of words, *the refugees from Sudan*, acts as a unit. So, for example, if we ask, "Who did the Red Cross evacuate?" we would answer "The refugees from Sudan." Or if we expressed the idea in the passive voice, we would say

(15a) The refugees from Sudan were evacuated by the Red Cross.

The second diagram shows a line extending from the prepositional phrase directly to the verb phrase. This diagram reflects the first interpretation above: the refugees are evacuated from Sudan. By connecting the line directly to the verb phrase, we indicate that *from Sudan* gives information that modifies the verb *evacuated* rather than the noun *refugees*. Notice that in this interpretation, the noun phrase *the refugees* is also part of the verb phrase, but the noun phrase and the prepositional phrase do not form a single unit. For example, the passive form would be

(15b) The refugees were evacuated from Sudan by the Red Cross.

In other words, the string of words *the refugees from Sudan* does not behave as a single structural unit (constituent) under this reading of the sentence.

Sometimes, particularly once you become more familiar with syntax, the constituency of words in a sentence will be intuitively obvious. At other times, however, you will need to think carefully. To tell if words are constituents, if they are working together or not, you can try several tests.

Substitution is a particularly good test. If you can replace

the candidate phrase with a pronoun (e.g., *they* or *it*) it's a noun phrase:

(16a) The golfers were forced off the course by the approaching lightning.

(16b) They were forced off the course by the approaching lightning.

Verb phrases can usually be replaced with do so:

(17) Yolanda has saved for retirement since her 20s. John has *done so* only since he married.

Prepositional phrases can often be replaced by a single word (traditionally identified as an adverb):

(18a) She went to the bar.

(18b) She went *there*.

You can also demonstrate phrase structure if the words will move as a unit. In other words, it is often possible to recast a sentence so that it still has more or less the same meaning but so that its elements appear in a different order. Sometimes, you can do this by simple rearrangement:

(19a) They found their guest waiting *in the den*.

(19b) *In the den,* they found their guest waiting.

Movement can also be shown by creating a so-called "wh-cleft" sentence.[1] Wh-cleft sentences are formed by rearranging a basic sentence in this fashion:

(20a) That woman left her abusive husband.

(20b) *Her abusive husband* is whom that woman left.

The cleft sentence has the form:

**moved item + form of TO BE + wh-word + clause**

Notice that only phrases move—you can't cleft a single word, or any other string of words that doesn't constitute a phrase:

(20c) *Husband is whom that woman left her abusive.

(20d) *Abusive husband is whom that woman left her.

(20e) *Her abusive is whom that woman left husband.

One other test that often works is to see if the candidate phrase could be the answer to a (normal) question.

(21) Where did they find their guest? In the den.

But there is no natural question about the content of the sentence that could elicit "found their" as an answer.[2]

These tests for constituency are important to understand when you come to analyze sentences for yourself, so it's a good idea to take some time to make sure you fully understand how to apply them.

Notes

[1] The name comes from the presence of a wh- word (who, why, etc.). There are also other types of cleft sentences.

[2] Of course you can ask questions such as "what are the second and third words of the sentence," but those aren't sentences about the content of the sentence.

## Finding Subjects and Predicates

Two of the most important constituents to identify are the subject and the predicate. In simple sentences, finding the subject is intuitively obvious. In elaborate sentences, we need to be more systematic. We can find the subject of even the most complex sentences by noticing a property of English grammar.

(22a) Samantha *was* expecting a phone call.

(22b) *Was* Samantha expecting a phone call?

(23a) He *has* been cheating on his wife again.

(23b) *Has* he been cheating on his wife again?

(24a) The senator *could* retire after the current session.

(24b) *Could* the senator retire after the current session?

(25a) That talented writer *is* a drunken sot.

(25b) *Is* that talented writer a drunken sot?

If we think of questions as being formed from the equivalent statement, we can see that yes-no questions are formed by moving the italicized verb from one side of the subject to the other.[1] The verbs that move are either auxiliary verbs or a form of the verb *to be*.

We can use this fact of English grammar as a test for our subjects. Simply turn the clause into a yes-no question (or if it's already a question, change it to a statement) and observe the position of the moving verb. This technique will work even when the subject is very long and contains many elements inside it:[2]

(26a) The man who walked barefoot for ten miles across the burning-hot desert *is* thirsty.

(26b) *Is* the man who walked barefoot for ten miles across the burning-hot desert thirsty?

Sometimes the statement form of a sentence doesn't have an auxiliary verb. In this case, a dummy verb, a form of the verb *to do*, is inserted:

(27a) Bob thinks he is a good musician.

(27b) *Does* Bob think he is a good musician?

Although it may seem that this process violates the general pattern, there is an alternate form that we can use when we want to emphasize a point, perhaps when responding to someone else's assertion that Bob is not confident in his musical abilities:

(27c) Bob *does* think he is a good musician.

So even here, we can apply our subject-finding test, by contrasting the yes-no question with the emphatic form rather than the plain statement.

Once we have identified the subject, the rest of the clause is the predicate.

Notes

[1] The technical term for the verb that moves is the **operator**.

[2] There are some sentences (other than questions), where the ordinary order of subject and verb is inverted (e.g., "From his workshop have come many outstanding paintings.") In such cases, this test becomes a little more complicated. Turning this into a question will require significant reordering ("Have many outstanding paintings come from his workshop?") Notice, though, that the question form forces the actual subject ("many outstanding paintings") back to its default position, and we can then turn this question back into a statement that uses the more ordinary word order ("Many outstanding paintings have come from his workshop.")
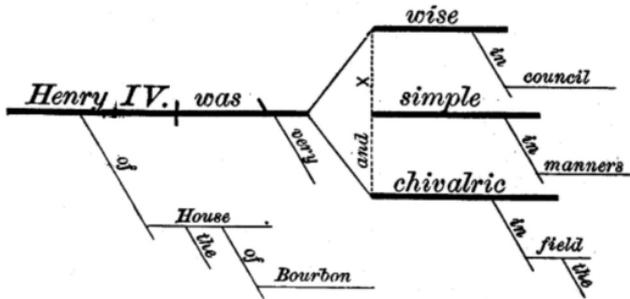
## Diagrams

Q. Please explain how to diagram a sentence.
A. First spread the sentence out on a clean, flat surface, such as an ironing board. Then, using a sharp pencil or X-Acto knife, locate the 'predicate,' which indicates where the action has taken place and is usually located directly behind the gills. For example, in the sentence: 'LaMont never would of bit a forest ranger,' the action probably took place in a forest. Thus your diagram would be shaped like a little tree with branches sticking out of it to indicate the locations of the various particles of speech, such as your gerunds, proverbs, adjutants, etc.
—Dave Barry, Ask Mr. Language Person

Grammarians like diagrams. You may have been compelled to draw something this in school:

wise
in council
Henry IV. was
very
x
simple
and
chivalric
in manners
House
the of
Bourbon
in field
the

from Reed and Kellogg, Graded Lessons in English, p. 60

Sometimes, students spend so much time drawing diagrams that they come to think of them as all there is to grammar. So what's the point of diagrams? Diagrams show you the constituency of sentences visually. As we have said above, constituency is one of the central issues of syntax, so diagrams make important assertions about language, but keep in mind that diagrams are only a tool, a method of showing what you understand about sentence structure that other people will be able to apprehend rapidly.

Diagrams drawn with the method illustrated above are known as Reed-Kellogg diagrams, after the authors who developed this system in the 1860s. Although such diagrams are frequently encountered in junior high and high school textbooks, they are rarely found outside the schoolroom. Of course, Reed-Kellogg diagrams are meant to be pedagogical, so that limitation is not necessarily a bad thing. They do capture a number of important features of sentence structure in a clear visual layout. In the diagram above, for example, we can quickly appreciate the core of the sentence and how the other elements relate to that core.

For the purposes of giving a truly accurate structural

view of a sentence, however, Reed-Kellogg diagrams have many limitations. One drawback is that to understand these diagrams, you need to learn the significance of a relatively wide variety of different symbols. In this diagram alone we have thick horizontal line, thin horizontal lines, different kinds of slanting lines, and a dotted line. And there are a number of other symbols for structures not found in this example. More significantly, notice, in the diagram above, that determiners like *the*, adverbs like *very*, and prepositions like *of* are all indicated in the same way: by writing them on a slanting line. In other words, no distinction is made among these three very different word classes. As we develop our account of English syntax, we will see other ways in which Reed-Kellogg diagrams give a misleading picture of English syntax.

Linguists favor a different method for representing structure, known as a "tree diagram." You have already seen several of these tree diagrams, but we have not stopped to look closely at them. They get their names because they look somewhat trees turned upside down, and they show the various constituents branching off. Tree diagrams are used in many disciplines other than linguistics, for example, computer science. They are very good at showing structures that are hierarchical. As language is organized this way, it is a good candidate for representation with tree diagrams. The following is an example of the sort of tree diagram that we will be using for this course:

(28)



Clause

NP: Subject — VP: Predicate

AP: SComp   PP: agent

NP: ObjP

N   VL   Adj   P   Adj   N
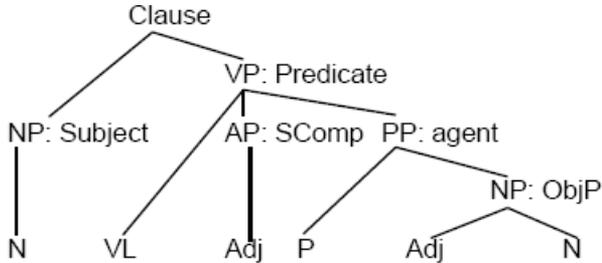
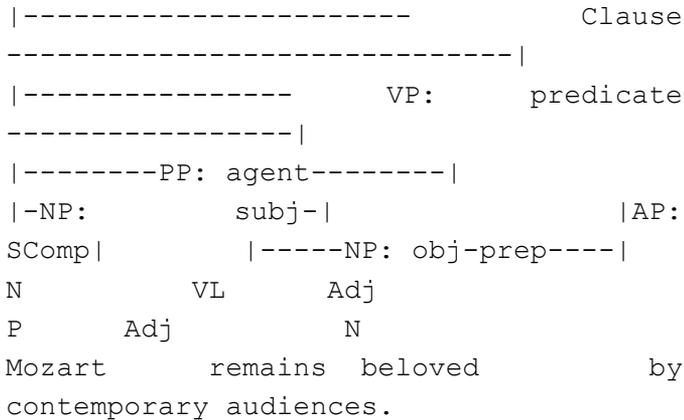Mozart remains beloved by contemporary audiences.

Tree diagrams have several advantages over Reed-Kellogg diagrams. They are drawn by following a few simple principles, so you don't have to remember what different line shapes and orientations signify. Despite that simplicity, tree diagrams can represent phrase structure accurately. One practical disadvantage, however, is that they become unwieldy for very long sentences. In comparison, Reed-Kellogg diagrams are more compact. That is, you can more easily fit your analysis of a longer sentence on one page if you use Reed-Kellogg notation than if you use tree notation.

Both tree and Reed-Kellogg diagrams are unreasonably awkward to use in certain contexts, for example in an e-mail or on-line posting where graphics may not be available. In such places, you may also run across other attempts to show syntactic relationships using only ordinary characters. One possibility is to use labeled brackets. The brackets substitute for the lines in showing how the constituents are grouped:

[[Mozart (NP: subj)] [remains (VL) [beloved (AP: s-comp)] [by [contemporary audiences (NP: obj-prep)] (PP: agent) (VP: predicate)] (Clause)].

All the same information is here, but unfortunately, this method tends to lack visual clarity. It's difficult to grasp

the constituency of the sentence at a glance the way you can with a diagram. Still another method to indicate constituents uses horizontal lines and labels above (or below). These are a kind of flattened tree diagram, which have the advantage of saving space:[1]

```
|----------------------          Clause
----------------------------|
|---------------          VP:       predicate
----------------|
|--------PP: agent--------|
|-NP:          subj-|                  |AP:
SComp|          |-----NP: obj-prep----|
N          VL        Adj
P      Adj            N
Mozart      remains  beloved            by
contemporary audiences.
```

We will generally use tree diagrams in this course. As long as the diagram accurately conveys the sentence structure, however, the exact diagramming scheme we use does not make too much difference.[2] The purpose of diagrams is merely to help us visualize the structure. They are the tools, not the ends, of grammatical analysis.

———

Notes

[1] Making such diagrams legible requires that you use a fixed-space font such as Courier rather than the more ordinary proportional fonts used by default in word processors and web pages.

[2] Note that this requirement makes Reed-Kellogg diagrams unsuitable. Their representation of verb phrases in particular is lacking.

# Principles for Drawing Tree Diagrams

Different textbooks present different variations on the tree diagram, depending on the details of their analysis. The basic principles, however, remain constant, and if you understand them, you should be able to grasp the diagrams' essence no matter what the details. Tree diagrams are most often drawn above the item being diagrammed.[1] A tree consists of **nodes**. A node has a label, for example NP for noun phrase, VP for verb phrase, and so on. The node at the very top of the tree, the one from which all the others ultimately derive, is called the **root** of the tree. The nodes are connected by lines, known as **edges**. The terminal nodes of our diagrams, the ones without any children, are known as the **leaves** of the tree. They will contain labels for the word categories (parts of speech) of each word. (The following examples contain details that we haven't introduced yet. Don't worry about these yet. It's only important here that you understand the general message that the diagram is meant to communicate.)
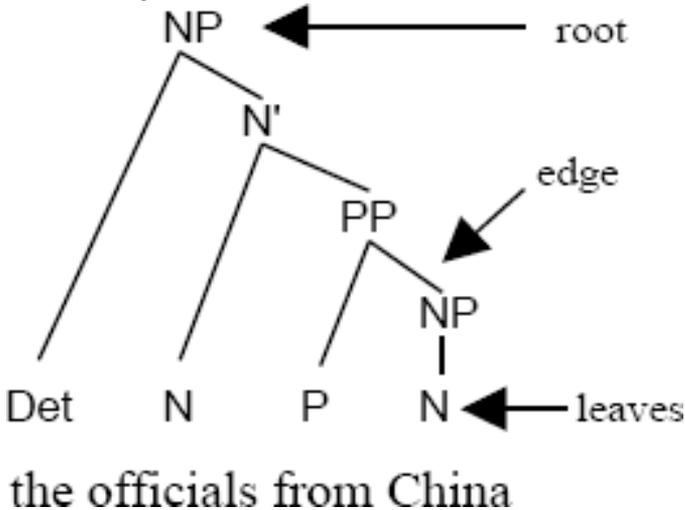
Borrowing terminology from genealogical trees, the nodes below another node are sometimes called the **children** of that node. A node that has children is a **parent** node. Just as with people, parent nodes can themselves be children of other parents. If we need to talk about nodes that are children of children, we call them **descendants**. Unlike genealogical trees, however, it is important to note that while a node may have several children, it only has one parent. Also, each line should connect to one child node. Do not show two edges connecting to a single word.
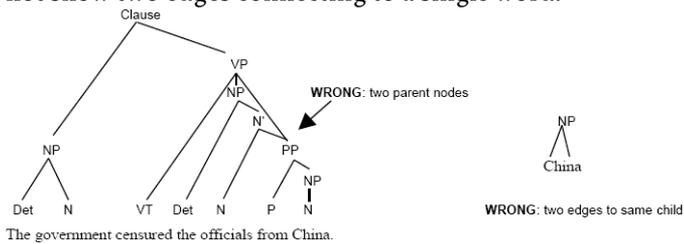


Further, you should always space out your nodes so that edges do not cross one another. This practice is merely for visual clarity. In principle, there's no reason why the lines must never cross.

Sometimes, we will not want to analyze a sentence completely. Initially, we will lack the knowledge to analyze everything in a sentence. Later on, with more complex sentences, we may choose to ignore details that aren't relevant to our purpose. In these cases, we will indicate an unanalyzed constituent by using a triangle.



*An unanalyzed constituent*

___
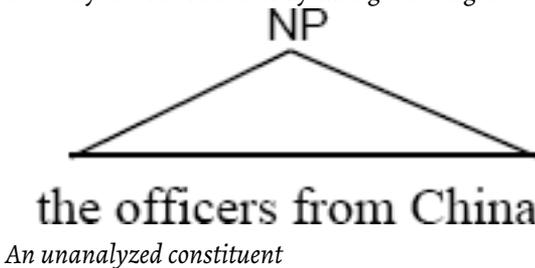
Notes

[1] Tree diagrams can also be drawn under the sentence, although in this course we will follow the more common practice.

# 6

# Chapter 6. Verb Phrases

In the previous chapter, we examined some of the basics of sentence structure. Over the next few chapters, we will deepen our understanding by studying how the most important phrase types are structured. Because every sentence has a predicate, and every predicate is a verb phrase, every sentence is ultimately structured around a verb. We will therefore begin with verb phrases.

In Chapter 3, we saw that some words shared enough structural principles that they deserved to be grouped into a category: verb. Although the members of this category have certain things in common, they do not all behave identically. In particular, verbs differ with respect to what attributes can appear within their phrase. Different verbs require different attributes. Consider, for example, what attributes can appear after a verb like neglect:

(1a) Reginald neglected his hygiene.

(1b) *Reginald neglected.

(1c) *Reginald neglected hygienic

(1d) Reginald neglected his chores.

(1e) *Reginald neglected his hygiene his chores.

(1f) *Reginald neglected his chores unpleasant.

As these examples show, *neglected* requires exactly one noun phrase to follow it (1a and 1d). It does not permit us to drop the NP (1b) or to replace it with an AdjP (1c). It also doesn't allow two NP's (1e) or one NP and one AdjP (1f). All of these permutations, however, are possible with other verbs:

(2a) Reginald primped. [verb only]

(2b) Reginald seems hygienic. [verb + AdjP]

(2c) Reginald gave his barber a tip. [verb + NP + NP]

(2d) Reginald found his chores unpleasant. [verb + NP + AdjP]

Because the verb determines the rest of the structure, we will say that the verb **licenses** (i.e., permits) these constituents, which are known as **complements**. Thus *neglected* licenses a single noun phrase after it, and no other pattern. In this instance, we could say that the verb requires a noun phrase, rather than simply permitting one. One complement that is required by every verb is the subject.[1] But in many cases, verbs license multiple patterns:

(3a) Susan ate dinner.

(3b) Susan ate.

As the examples above show, eat can be followed by a noun phrase or by nothing at all. To call the complement required, therefore, can be misleading if you assume that "required" means only one pattern is permitted.

Although verbs differ in what complements they license,

there are a relatively small number of patterns that occur very frequently. We can, therefore, group verbs into subtypes based on what complements they license. The following patterns are essential to recognize.

## Transitive Verbs (VT)

As the examples in (1) above show, verbs like *neglected* must be followed immediately by a noun phrase called the **direct object**.

(4) Bob kicked John.

In (4), John is the direct object. In this case, which is the prototypical situation, the direct object is used to indicate the thing affected by the verb.[1]

Verbs that have direct objects are known as **transitive verbs**. Note that the direct object is a grammatical function rather than a form. That function is usually filled by a noun phrase.

One useful test for transitive verbs is to see if you can change the sentences in which they appear into passive equivalents. The direct object of the active sentence becomes the subject of the passive version:

(5a) The fans **applauded** Jennifer's performance. [*active*]
(5b) Jennifer's performance **was applauded** by the fans. [*passive*]

If a sentence can be made passive, it is transitive. Be aware, however, that a small subgroup of transitive verbs (e.g., *cost*, *resemble*), do not have a passive equivalent. So if you cannot make a sentence passive, the verb may not be a transitive verb, but you need to check more closely.

We will label transitive verbs VT, which stands for "verb-transitive."

Notes:

[1] When we talk of the usual range of meaning for the direct object, we are indicating its semantic function, or thematic role as it is often called. The usual name given to this particular role is the **patient**. We won't have much to say about these semantic roles, but they should not be confused with grammatical roles like direct object. Note also that the direct object actually plays a much wider range of roles than the patient, but in these cases, it still has the same grammatical properties as the central cases in which the NP is a patient.

## Intransitive Verbs (VI)

Some verb are distinguished by what doesn't appear after them. These verbs are not followed by either a noun phrase or adjective phrase:

(6a) A howl *rose*.

(6b) *The audience *rose* a howl

(7a) Margaret *slept*.

(7b) *Margaret *slept* her bed.

We call these verbs **intransitive** and will label them "VI."

Unlike other types of verbs, intransitives can end sentences. Note, however, that intransitive verbs are not required to end the sentence. They can be followed by adverbs, prepositional phrases, and other optional elements:

(8) A howl rose from the audience.

(9) Margaret slept peacefully.

Such optional elements are called **adjuncts** of the verb phrase. Adjuncts can be added to any of the subtypes of verbs and don't serve to distinguish one subtype from another. We will return to adjuncts, and how to tell them

apart from complements, after we have finished our survey of verb patterns.

## Linking Verbs (VL)

Some other verbs can be followed by a noun phrase, but this NP bears a different relationship to the subject.

(8a) Lewis *remained* an obstinate man.

In this case, the NP to the right of the verb does not identify an object that is separate from the subject, as was the case with transitive verbs. Effectively, this NP renames the subject. If we think about what's going on here in terms of predication, the second NP predicates something (that is, it makes an assertion) about the subject. Contrast that with transitive sentences like (4) above, repeated here for convenience:

(4) Bob kicked John.

Here, the second NP (Bob) doesn't predicate anything about the subject (*John*) directly. Only the entire verb phrase does the predication. For this reason, these phrases are not called objects but **subject complements**, because they complete (complement) the meaning of the subject.

Because the NP after the verb is not a distinct object, linking verbs are not transitive. They are a special kind of intransitive verb, one with complex predication.[1] One consequence of being intransitive verbs is that linking verbs cannot be made passive:

(8a) *An obstinate man was remained by Lewis.

Linking verbs can also be followed by an adjective phrase, in which case the AdjP describes some characteristic of the subject:

(9) The president *looked* haggard.

Whether this phrase is an AdjP or an NP, it fills the same grammatical role: subject complement.[2]

Linking verbs are a small class. Some examples: *seem, become, remain, taste, smell, feel*. We will label such verbs VL.

# BE

The most common verb in English, and also the most irregular, is *to be*. This verb is generally considered a linking verb. Like other linking verbs, BE[3] can take a subject complement, either an NP or an AdjP:

(10) That toddler *is* a hyperactive child. [NP: subject complement]

(11) Dorothy Parker *was* witty. [AP: subject complement]

Unlike other linking verbs, you can also follow BE with a modifier that indicates a place, either literally or metaphorically:

(12a) My mother was in the next room. [PP: place]

Ordinary linking verbs do not permit this construction:

(12b) *My mother became in the next room.

We will label BE as another linking verb, but you should be aware of its differences from other members of this category. Later we will find still more ways in which BE is an exceptional verb.

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Notes

[1] Many grammar books treat linking verbs as a separate category, neither transitive nor intransitive, but we are considering transitivity to be a binary quality. Any verb can be categorized as transitive or intransitive, but there is more to verb-phrase structure than just transitivity.

[2] Some grammar books call subject complements either predicate noun or predicate adjective depending on

whether they are noun phrases or adjective phrases, but we will not use those terms, because they blur the distinction between form (NP or AdjP) and function (subject complement).

[3] By writing the verb in capital letters, we mean any of the forms of the verb. In this instance, BE includes *am, are, is, was, were, be, been*, and *being*.

## Ditransitive Verbs (VD)

The transitive verbs we examined above had only one mandatory phrase following them. Some verbs, however, are followed by two noun-phrase objects: one is the object acted upon (the direct object), the other is the recipient of the direct object. The NP that receives the direct object is called the **indirect object**. It gets this name because it is presumed to be less directly affected by the verb than the direct object. Notice that the indirect object comes before the direct object:

|  |  | I.O. | D.O. |
|---|---|---|---|
| (13a) | The school board *gave* | the teachers | a raise. |

|  |  | I.O. | D.O. |
|---|---|---|---|
| (14a) | The exchange student *bought* | her hosts | a thank-you gift. |

Because such verbs have two objects they are called **ditransitive verbs**, in contrast with the **monotransitive** VT verbs. There is no generally accepted label to distinguish this verb type from ordinary monotransitive verbs, so we will label them VD.

Verbs that allow this two-noun-phrase pattern often

have an alternate form where a prepositional phrase serves the same function as the indirect object:

(13b) The school board gave a raise to the teachers.

(14b) The exchange student bought a thank-you gift for her hosts.

Many grammar books label these prepositional phrases indirect objects, but technically they are not. The prepositional phrases here play the same semantic role as the equivalent indirect objects, a role known as the **recipient**, but remember that semantic roles differ from grammatical roles. Recipient is a semantic role, indirect object is a grammatical role.[1] A verb can only be VD if it is followed by two noun phrases. If it is followed by only one NP, it is an ordinary monotransitive (VT) verb.

Ditransitive verbs can be made passive just like monotransitive ones. The passive forms of ditransitive verbs move one object into the subject position and leave the other in the original place. Usually, however, it is the indirect rather than the direct object that is moved. Moving the direct object typically sounds slightly strange:

(15a) Teachers were given a raise by the school board.

(15b) ?A raise was given the teachers by the school board.

————

Notes

[1] Notice that our logic here in distinguishing indirect objects from PPs with the same semantic role is exactly parallel to the uncontroversial treatment of *by*-phrases in passive sentences (e.g., "John was kicked by Bob"). There, the *by*-phrase expresses the role of the actor, the same role played by the subject in the active equivalent ("Bob kicked John"). But no one would call *by Bob* the grammatical subject of the passive sentence. That role is filled by *John*.

## Complex Transitive Verbs (VC)

Some verbs are followed by two phrases, but they have a different order and function from VD verbs: (16) My grandpa calls [teenagers] [blithering idiots]. In (16), we have two NPs after the verb, but notice that the relationship between the two is not what we saw with ditransitive verbs. The first NP, *teenagers* is not receiving *idiots*. It's not an indirect object at all. In fact, it's the direct object of *calls* (the thing that's being named). The second NP isn't receiving anything either. It's renaming the direct object. If that sounds similar to what an NP after a linking verb does that's no accident. This too is a complement, but since it refers to the object, we will, sensibly enough, call it an object complement. An object complement renames or defines a quality of the direct object. Like subject complements, object complements can also be adjective phrases: (17) Some linguists consider [Noam Chomsky] [mistaken]. Just as linking verbs are a type of intransitive verb with complex predication, these verbs are a form of complex predication for transitive verbs. We will label such verbs VC.

## Summary of Patterns

The following diagram above is not a sentence diagram. It shows how the different subtypes of verb relate to one another.
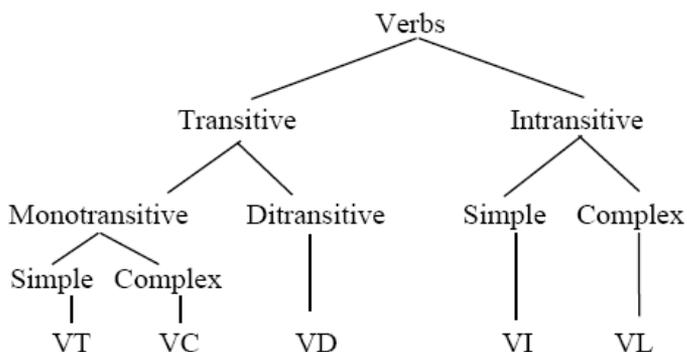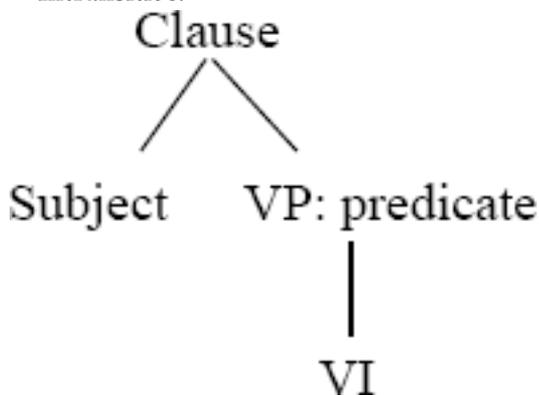
*Hierarchy of Verb Types*

Here is a summary list of the five patterns we have learned, with the elements presented in linear order. This list is deliberately abstract. To see examples of sentences of these types, see the preceding sections:
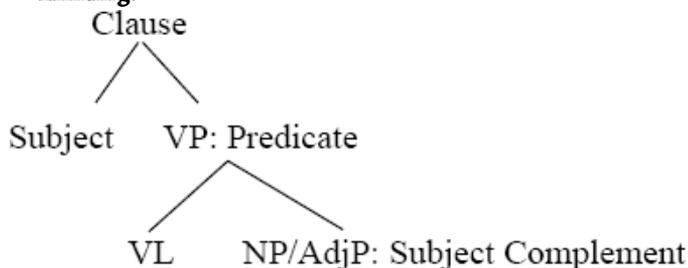
1. Intransitive: subject + VI
2. Linking: subject + VL + subject complement
3. Transitive: subject + VT + direct object
4. Ditransitive: subject + VD + indirect object + direct object
5. Complex Transitive: subject + VC + direct object + object complement

And here are diagrams of the same patterns, showing how they typically appear in a clause:
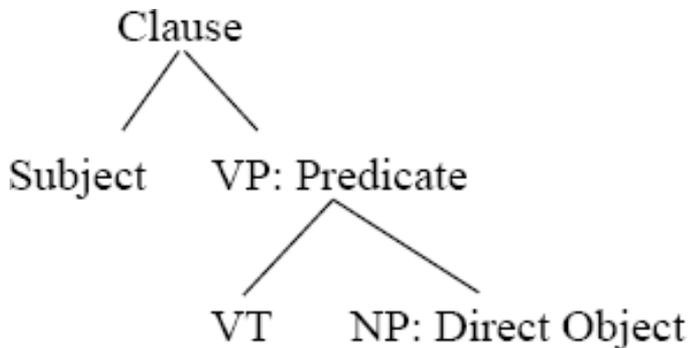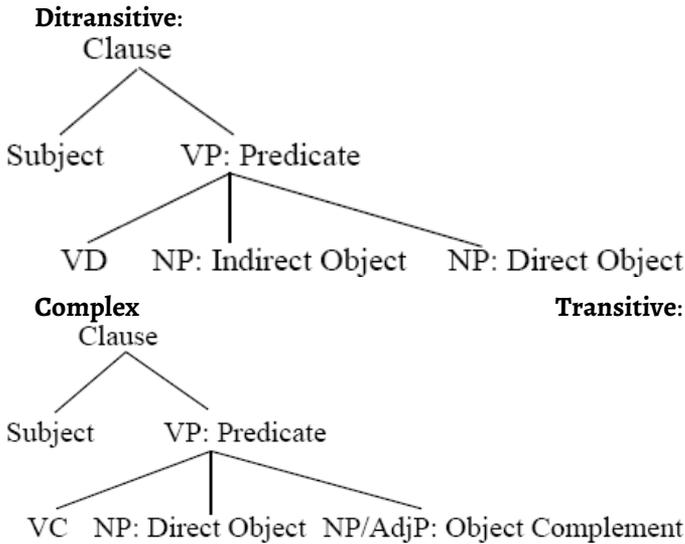
**Intransitive:**

Clause
- Subject
- VP: predicate
  - VI

**Linking:**

Clause
- Subject
- VP: Predicate
  - VL
  - NP/AdjP: Subject Complement

Note: *to be* can have subject complements of other phrase types, e.g., PP, etc.

**Transitive:**

Clause
- Subject
- VP: Predicate
  - VT
  - NP: Direct Object

**Ditransitive**:

Clause
- Subject
- VP: Predicate
  - VD
  - NP: Indirect Object
  - NP: Direct Object

**Complex Transitive**:

Clause
- Subject
- VP: Predicate
  - VC
  - NP: Direct Object
  - NP/AdjP: Object Complement

Looking at the list above, it becomes evident that the subject is the only complement that is found in every pattern. Subjects are also unusual in that they are not part of the verb phrase; they are known as **external complements**. All the other complements are **internal complements**; that is, they are part of the verb phrase and hence part of the predicate.

To analyze sentences fluidly, you need to learn these verb patterns thoroughly. You should be able to look at the constituents after a verb and say to yourself, "This pattern means that this verb is of type __". Note that if you consult a major reference grammar such as *A Comprehensive Grammar of the English Language* or *The Cambridge Grammar of the English Language*, you will find more subtypes of verbs. These other patterns, however, are minor variations on the basic ones we have presented. If you understand these five, the subtler variations will be relatively easy to understand.

Just as words can fall into several different parts of speech, verb can employ several different patterns. For this

reason, you can't just assume that a particular verb will always fall into one subtype. You must look at the sentence in which that verb appears.

## Adjuncts

When we discussed intransitive verbs, we introduced the concept of an **adjunct**. Since these optional elements of the verb phrase play no role in deciding which verb pattern is used in a particular sentence, you don't need to worry about them while you're figuring out what pattern is used. In practical terms, this means you can disregard adverb phrases and prepositional phrases when determining the verb subtype.[1] (Note that we're not ignoring them entirely; we're just putting them aside temporarily while we figure out the basic pattern of the verb phrase.)[2]

Simply ignoring adverb phrases and prepositional phrases, however, will not be enough to allow us to distinguish all complements from all adjuncts. Under some conditions NPs and AdjPs can also be adjuncts. If we don't distinguish those adjuncts, we can misanalyze our sentences.

(18) My wife fed the dog freshly-cooked chicken.
(19) My wife fed the dog Tuesday morning.

In both (18) and (19), two NPs follow the verb *fed*. (18) is straightforward. The dog receives the chicken; we have a pattern of indirect object + direct object. On the other hand, if we try to fit (19) to the same pattern, things seem strange. Is Tuesday morning being fed to the dog? Clearly not. The other pattern with two NPs, VC, doesn't make much sense either. For that to work, Tuesday morning would be the object complement. But clearly that phrase isn't renaming the dog. *Tuesday morning* actually tells us when the action

occurred. In other words, it is an adjunct, and *fed* in (19) is of type VT, with only a direct object as a complement.

If all this seems very intricate, don't despair. First, the better you know the basic patterns, the easier it will be to spot the unusual cases. Second, there is a relatively simple test to distinguish complements from adjuncts: *do so* substitution. The phrase *do so*, changed as necessary for the appropriate tense and number, can be used to replace a verb phrase and all its complements. It does not replace the adjuncts, however:

(18a) My wife fed the dog freshly-cooked chicken yesterday, and I did so today.

(19a) My wife fed the dog Tuesday morning, and I did so Wednesday evening.

(19b) *My wife fed the dog Tuesday morning, and I did so the cat.

In (18a), *did so* replaces the verb and both noun phrases (*fed the dog freshly-cooked chicken*). In (19a), it replaces *fed the dog*, but as (19b) shows it cannot replace *fed in the morning*, or even *fed* alone.

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Notes

[1] Some verbs (e.g., *put*) do require certain prepositional phrases; strictly speaking, such prepositional phrases are actually complements rather than adjuncts. But since none of our verb subtypes involve prepositional phrases, you do not need to distinguish between PP complements and adjuncts for this course.

[2] In some grammar books, you will find verb-phrase adjuncts called **adverbials**. This label is meant to express the traditional notion that such prepositional phrases and other constituents function in the same roles that adverbs do, while keeping distinct the form (AdvP, PP, etc.) from

the function (adverbial). Although the desire to distinguish form and function is sound, I don't use the term because in practice I have found that the similarity in form between *adverb* and *adverbial* produces continuing confusion.

# Chapter 7. Noun Phrases

We have already looked a bit at what nouns are and at some of their properties. Noun phrases can be extremely complex. In this chapter, we will explore some fundamentals of how noun phrases are structured. We won't cover everything. In particular, we'll leave certain issues of complex layering, where the NP contains many different elements, to a later chapter.

We will start by looking more closely at nouns themselves. In the previous chapter, we discovered that there are different types of verbs, and that those verb types influenced the structure of the verb phrase. With nouns as well, there are different subtypes, and those types play a role in the structure of the noun phrase.

# Noun Subtypes

Nouns differ as to what other words can occur in the same noun phrase.

Consider, for example, how we can complete a frame sentence like "I saw ____." with different NPs.[1]

| (1) | (2) | (3) | (4) | (5) |
| --- | --- | --- | --- | --- |
| Fred | *Netherland | *cat | trash | stone |
| *the Fred | *the Netherland | the cat | the trash | the stone |
| *a Fred | *a Netherland | a cat | *a trash | a stone |
| *some Fred | *some Netherland | *some cat | some trash | some stone |
| *the Freds | the Netherlands | the cats | *the trashes | the stones |
| *Freds | *Netherlands | cats | *trash | stones |

The elements of this table flagged with asterisks are ungrammatical as completions for the given frame.[2] In short, different nouns have different restrictions on what determiners they can take and on whether or not they can be made plural. This behavior is regular enough among groups of nouns that we can say that there are subtypes of nouns. We can explain the behavior of the nouns above by introducing two subdivisions: **proper** vs. **common** nouns, and **count** vs. **non-count** nouns.

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Notes

[1] The frame sentence is deliberately brief to allow it to make sense with a wide variety of nouns, but because of this vagueness, some people don't see why some of the items in column 5 are not flagged as ungrammatical. If you're in that group, try expanding the frame sentence a

bit to give yourself more context. For example, add ("in the courtyard").

[2] *Some* here should be read as the unstressed determiner with the meaning "an unspecified quantity," not the stressed word, which often means something like "a remarkable" (e.g., "She is some tennis player.")

## Proper vs. Common Nouns

The distinction between proper and common nouns is probably familiar to you from your earlier education. *Fred* and *Netherlands* are instances of **proper nouns**. A proper noun is a type of noun that refers to a specific person, place, or thing (*Evelyn, Cairo, Saturday,* etc.) **Common nouns** refer to classes of things (*cat, trash, stone,* etc.) rather than particular ones. All nouns that are not proper are common.

The behavior of proper nouns is illustrated in the first two columns of the table above. Most proper nouns behave like *Fred* in column 1. They do not allow a plural form (*Evelyns, *Cairos, etc.) and do not appear with determiners (*a Baltimore, *some Evelyn, etc.). Some proper nouns do appear in a plural form and with a determiner: *the Netherlands* in column 2, for example. But these proper nouns still behave differently from common nouns. There is no contrast in number; *the Netherlands* cannot be made singular (*the Netherland), and the determiner cannot be varied the way it can with ordinary common nouns:

(1) *I went to Netherlands.
(2) *I only had time to visit a Netherland.

There are also singular proper nouns that take an article, such as *the Kremlin.* Here too, there is no plural counterpart (**the Kremlins*) and the article cannot be varied.

Expressions like *Princeton University* or *the United States of America* are frequently called proper nouns as well, but this a somewhat misleading simplification. Remember that *noun* is a category label for an individual word. Strictly, the proper nouns here are *Princeton* and *America*. *University* and *states* are common nouns, and *united* is an adjective. The complete expressions are **proper names**. A proper name contains a proper noun, and may contain other elements. If there is only a proper noun in the NP, it is still a proper name.[1]

In some situations, a proper noun can be converted to a common noun and can be plural or take a determiner:

(3) The Newtons of this world perceive connections that the rest of us have never even thought to look for.

Here, a proper name has been made to stand for a whole class, and hence behaves like other common nouns.

Proper names have a few structural peculiarities. We won't go into them in detail in this course, but we will discuss the patterns that may cause problems for your analysis when we review NP structure at the end of the chapter.

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Notes

[1] The proper noun does not need to be the head of the proper name. For example, in *the United States of America*, the head is *states*.


## Count vs. Mass Nouns

Common nouns can be subdivided according to what determiners they permit. Nouns such as those in column (3) of the table above can be made plural with no determiner (as in *cars*), and they can take the indefinite

article *a/an* (as in *a car*). Words that behave this way are typically regarded as referring to entities that are seen as individual, countable units, and hence they are known as **count nouns**. Count nouns can be either concrete items (*computer, book, house*, etc.) or abstract ideas (*goal, belief, hope,* etc.).

Nouns that behave like the one in column (4) are called **mass nouns** (or non-count nouns). They typically refer to things that are viewed as a mass rather than individual units, or which have no precise shape or boundary. Mass nouns also can be either concrete (*milk, wool, spaghetti*, etc.) or abstract (*happiness, communism, integrity*). They cannot usually be made plural (\**two wools*), nor do they take the indefinite article (\**a wool*). If we want to count mass nouns, we must add a count noun to specify the quantity (two glasses of milk).

## Count/Mass as a Function

Nouns like those in column (5) (*brick, cake, paper, stone*, etc.) can take all the determiners that count nouns can take, as well as all the determiners that mass nouns can take. There is, however, a distinction in meaning. With *stone* or *some stone*, the mass-noun uses, noun phrase refers to the material; with *stones*, the count-noun use, the noun phrase refers to individual items. *The stone*, which can be used for both mass and count nouns, is ambiguous: we may be thinking of either material or an item. Often, context will make it clear which use is intended:

(4) The stone used in this building comes from Italy
(5) The stone that broke the window was lying on the floor.

In sentence (4), *stone* is used as a mass noun; in sentence (5) it is used as a count noun. Additionally, some nouns
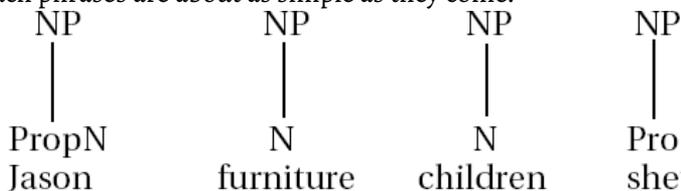
that are typically either mass or count can be pressed into service the other way. For example, *butter* is typically a mass noun, and it seems strange to say *two butters*, but we can use it in a count sense in a sentence like the following:

(6) She likes butters from Wisconsin better than those from other states.

For this reason, we say that nouns are not inherently mass or count, but are rather used in mass or count functions.

## Noun-Phrase Structure

As the preceding discussion shows, some nouns can appear alone in a noun phrase, without a determiner or any other word. These nouns include many proper nouns, mass nouns, plural count nouns, and pronouns. (Remember, we are treating pronouns as a subtype of nouns.) Diagrams of such phrases are about as simple as they come:

```
   NP            NP           NP          NP
   |             |            |           |
 PropN           N            N          Pro
 Jason       furniture     children      she
```
[1]

Only a little more complex is the case of a noun appearing with a determiner. Determiners are extremely common in noun phrases. You will encounter a great many noun phrases that contain them. If you are still unclear about the category of determiner, you may want to review the relevant section of chapter 3 at this point

NP

D — N

the    article
___

NP

D — N

some    rice

NP

D — N

three    mangoes
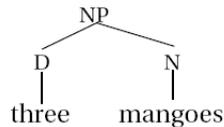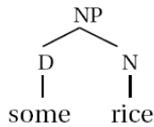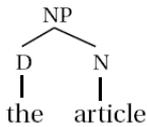
Notes

[1] For the purposes of diagrams in this course, we will label proper nouns as "PropN" and pronouns as "Pro," although it would be equally correct (although less specific) to label them as "N". We will not distinguish mass from count nouns in the diagram.

# The Determinative Function

Another fairly common type of NP is one containing a genitive:

(7) Garth's reply

This NP looks almost the same as the NPs above, but *Garth* is a proper noun, not a determiner. And yet *Garth* seems to occupy the same "slot" in the noun phrase. Notice that we can use either a determiner or the proper noun, but not both:

(7a) the reply

(7b) *the Garth's reply

(7c) *Garth's the reply

At this point, you may be ready to assume that *Garth's* actually is a determiner, but that conclusion leads to some unfortunate consequences. First, we would have to say that any noun could change its part of speech simply by adding the genitive inflection. In other words, the category of determiner, which we have already described as containing a small number of words that have a principally grammatical function becomes an open-ended set.

Further, this slot isn't just occupied by genitive nouns. It can be occupied by entire phrases:

(8) The President of Liberia's mistake

If we're going to call these determiners too, then we are saying that entire phrases can be described as a word category, making a mess of our descriptive system. The solution to this puzzle is to recognize that the contrast between (7) and (7a) is one of two different forms, a determiner on the one hand and a genitive noun on the other, that share a common function. We will call this function the **determinative**.[1] In its most basic semantic role, a determinative indicates the definiteness of a noun phrase. That is, it tells us whether the NP has a specific referent or not.

One interesting thing to note about the genitive inflection is that it doesn't behave like a normal inflection (for example plural *-s*).

(8a) *The President's of Liberia mistake

The mistake was not that of Liberia but of its president, and yet we find the *'s* inflection at the end of the whole phrase and not attached to the head noun, president. Indeed, in informal varieties of English, the word to which the *'s* attaches doesn't even have to be a noun:

(9) The guy I was talking to's resume
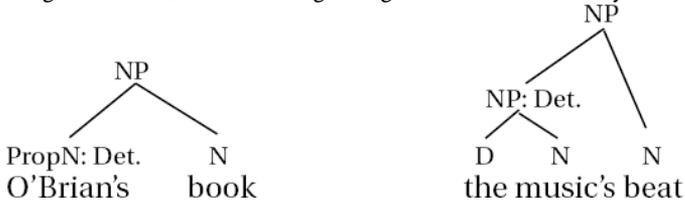
(10) The woman he plans to marry's opinion

In contrast, the plural *-s* inflection attaches to the head noun, not the end of the phrase.

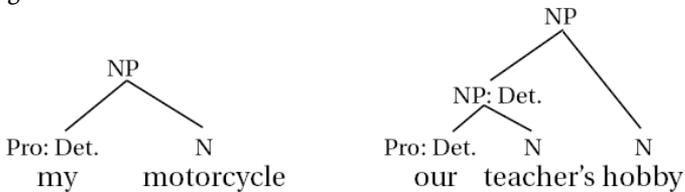(11) The Presidents of Liberia

(11a) *The President of Liberias

Because the genitive inflection appears at the end of the entire phrase when the phrase contains more than one word, and because phrases often contain only one word, there is no good reason to assume that the genitive behaves

differently with individual nouns than it does with multi-word phrases. Nevertheless, we will keep our diagrams simpler by omitting the NP node when the genitive is a single word.[2] We will diagram genitive NPs this way:

```
                NP                              NP
               /  \                           /    \
              /    \                    NP: Det.     \
   PropN: Det.      N                   /    \        \
   O'Brian's      book                 D      N        N
                                      the   music's   beat
```

Notice in the diagrams above that the genitives are labeled for their function. We will use "det." as an abbreviation for the determinative function. Don't confuse this with the word category label D, for determiner. Also note that in *the music's beat*, there are actually two determinatives. *The music* is the determinative for *beat* and *the* is the determinative for *music*. In other words, each NP has its own determinative slot. Because determiners prototypically fill the determinative function, we won't bother to indicate this function in our diagrams when they are playing their ordinary role.

Pronouns fit easily into the above scheme. Since they are a type of noun, we treat them just like other one-word genitives:

```
                NP                              NP
               /  \                           /    \
              /    \                    NP: Det.     \
    Pro: Det.       N                   /    \        \
      my         motorcycle        Pro: Det.  N        N
                                    our   teacher's  hobby
```

Notice that the second example above, like *the music's beat*, also contains two determinatives, but in this instance we did label *our* as a determinative because it is not a determiner.

Notes

[1] There is an unfortunate difference in terminology regarding the terms determiner and determinative. In The Comprehensive Grammar of the English Language, a work which was published in 1984 and which served as a major reference for a generation of other works on English grammar, the terms are used as they are in this text: *determiner* is a lexical category and *determinative* is a function. However, the major recent reference grammar, The Cambridge Grammar of the English Language, reverses the terms' denotation. There, *determiner* is the function and *determinative* is the lexical category. The authors of the Cambridge Grammar provide no explanation for this switch, which is unfortunate as it is certain to breed confusion. As most other works use determiner for the lexical category, I have retained the more traditional terms here.

[2] If the inconsistency bothers you, see the aside "On Simplified Diagrams" at the end of chapter 7 for a detailed explanation of my reasoning.

## Modifiers and Other Dependents

Noun phrases don't just contain nouns and determinatives, of course. They also contain elements such as adjectives.

(13) these diligent workers

In (13) the adjective *diligent* is a **modifier** of the head noun *workers*. *Modifier* is a general term for optional elements in a phrase that add descriptive information about the head word. We have already seen some modifiers in the verb phrase: the adjuncts. The noun phrase also resembles the verb phrase in that it can contain contain

complements. Distinguishing modifiers from complements in noun phrases, however, is much trickier than distinguishing them in verb phrases, and we will not do so in this course. Instead, we will content ourselves with simply lumping noun-phrase modifiers and complements into the broader category of dependent.

As we explore how to handle phrases such as the one in (13), we will consider several alternatives that we will wind up rejecting. Although you can skip to the end results, I strongly encourage you to follow along with the reasoning. The alternative analyses are ones that are used in other grammar books that you may encounter, and understanding why we should prefer one analysis over another is an important part of navigating grammar.

To explore the constituency of such phrases, I would like to begin looking at a traditional diagram to see what structure it assumes. A conventional Reed-Kellogg diagram of (13) would look like this:



This diagram tells us that *these* and *diligent* are both dependents of workers, but makes no further distinctions. If we translate this to a tree diagram, we get the following structure:

NP
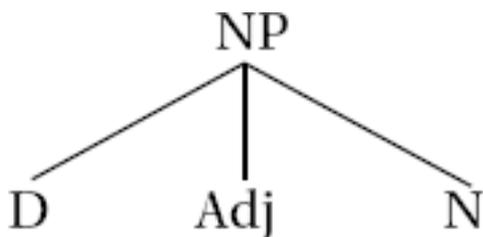
D          Adj          N
these diligent workers

Although the labels on the tree diagram add more
information, both diagrams make the same assertion
about the phrase's internal structure: we can distinguish
the head word from the dependents, but otherwise there is
no internal structure to the NP. Is this the correct account?
In particular, do the words *diligent workers* form their own
constituent? This question arises because *diligent workers*
can function as a noun phrase in its own right. For
example,

(14) You should give a raise to *diligent workers*.

So at first glance, it would seem logical to diagram
diligent workers as a noun phrase within the larger NP.[1]
Such a diagram would look like this:

NP

NP
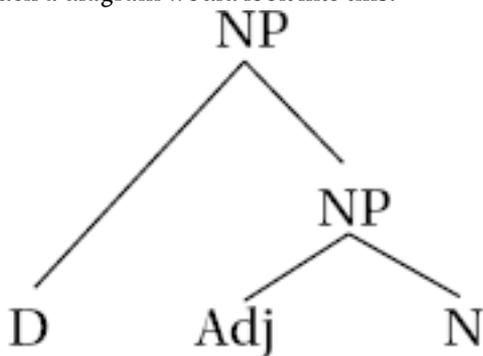
D          Adj          N
these diligent workers

If we are going to use this criterion for phrase-hood,

though, we get an odd result if the NP is singular: *this diligent worker*, because *diligent worker* cannot function as a full NP.

(14a) *You should give a raise to diligent worker.

The criterion that first led us to suppose this might be an NP, however, is suspect. The question is not, "Can this string of words function as a phrase in any context," but, "Does this string of words function as a phrase in this particular context." Let's apply our constituency tests to (14).

Remember that one of our tests is to create a cleft sentence, attempting to move the string of words we are testing to the front of the sentence. By this criterion, *these diligent workers* is a phrase but *diligent workers* is not, at least not when it is preceded by a determiner:

(14b) These diligent workers are whom you should give a raise to ___.

(14c) *Diligent workers are whom you should give a raise to these ___.[2]

Another test, pronoun substitution, yields a similar result. We can substitute the pronoun *them* for *these diligent workers*, but not for *diligent workers* alone:

(14d) You should give a raise to them.

(14e) *You should give a raise to this them.

If we apply the same tests to the singular form, *this diligent worker*, the results are be the same: *this diligent worker* is a phrase, and *diligent worker* is not.

(14f) This diligent worker is whom you should give a raise to ___.

(14g) *Diligent worker is whom you should give a raise to this ___.

(14h) You should give a raise to her.

(14i) *You should give a raise to this her.

At this point, we can reject the hypothesis that there are two nested NPs in this phrase. But before we revert to our first hypothesis that there is no internal structure to the NP, consider one further piece of data:

(15) If this diligent worker deserves a raise, that *one* does too.

As the parallel structure makes clear, *one* doesn't just substitute for *worker*. It replaces *diligent worker*, even though that unit passes none of our tests for phrase-hood. In short, diligent worker is a grammatical constituent&mdah;it behaves as a single unit—but it is not a phrase. To account for this behavior, we will introduce a constituent that it intermediate between individual words and NPs. Traditional grammar has no name for this unit, but we will call it a **nominal**, abbreviated "Nom."

With the addition of the nominal, a diagram of this diligent worker looks like this:
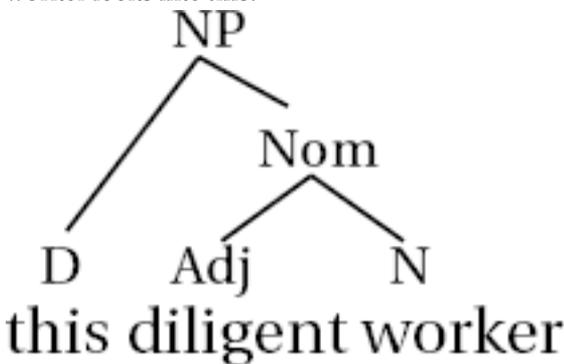


This diagram indicates that the words *diligent worker* form a constituent, the nominal, and that this constituent combines with the determiner this to form a complete noun phrase.

The nominal also helps explain the constituency of

prepositional phrases that appear within noun phrases. Consider, for example, a phrase like (16):

(16) a poem by Keats

Once again, we must decide how to represent the constituency of the phrase. The "flat" view would be diagrammed like this:
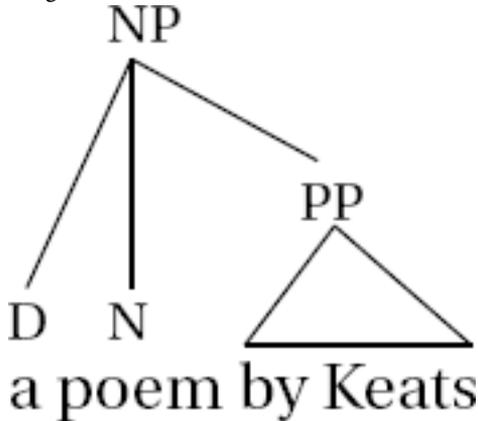


But there is good reason to believe that the noun and the PP also form a nominal. Consider a sentence like (17):

(17) Elizabeth read every essay by Coleridge and poem by Keats.

Here, the determiner *every* must apply to each part of the coordination. In other words, *and* links the constituents *essay by Coleridge* and *poem by Keats*. Like *diligent worker*, these units will not pass our tests for phrase-hood. Once again, they are an intermediate unit; they are nominals. Our diagram will therefore look like this:

```
            NP
           /  \
          /    Nom.
         /     /  \
        /     /    PP
       /     /    /△\
      D     N    /    \
   a poem  by Keats
```

———
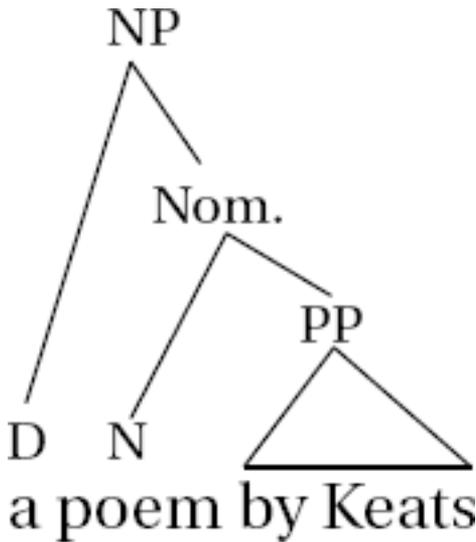
Notes

[1] One text that uses just such an analysis is Max Morenberg, *Doing Grammar*. 3rd. ed. Oxford UP, 2002.

[2] The "___" indicates the location of the clefted constituent in the original sentence.

## Generalizing the Pattern

Let us pause a moment to take stock of our NP structure. We've only looked at a few relatively simple NPs, but already we have a number of different cases:

1. One-noun NPs, e.g., *John, students,*
2. Determinative + N, e.g., *that book, Alison's divorce,*
3. Determinative + modifier + N, e.g., *the unpleasant boy,*
4. Determinative + N + modifier, e.g., *the dog on the sofa.*

Is there any general pattern here? We can easily formulate a general principle for cases 3 and 4 if we say that dependents other than determinatives combine to form

nominals, whether those dependents appear before or after the head noun, and determinatives combine with nominals to form NPs.
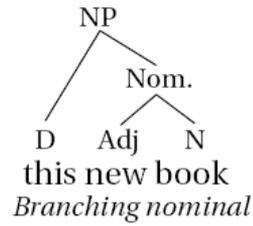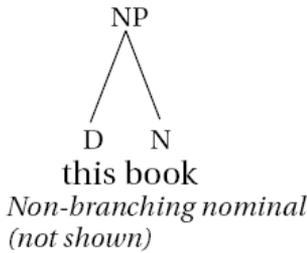
Case 2 can be unified with this same formulation if we assume that *book* in *that book* or *divorce* in *Alison's divorce* also constitute one-word nominals. We have already seen one-word phrases, so this assumption is not a stretch. In that case, our diagram would look like this:
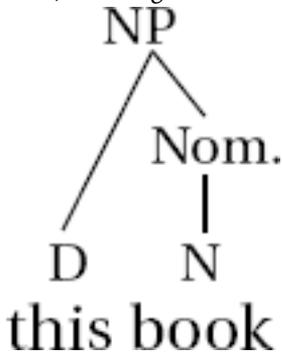


There is support other than theoretical symmetry for this analysis. *One*, which as we have seen substitutes for a nominal, can replace *book* alone. For example:

(18) This book has water damage, but that one is in perfect condition.

For this reason, we will assume that there is always a nominal level in every NP. As a practical matter, however, diagrams that show every single nominal become unwieldy and harder to read. We add a label that, because it is completely predictable, doesn't add much useful information. So in our diagrams, we will only show a nominal node if it branches.

| NP | NP |
|---|---|
| *Non-branching nominal (not shown)* | *Branching nominal* |

this book — Non-branching nominal (not shown)

this new book — Branching nominal

What about case 1? Our assumption about nominals will apply here too. In other words, if we were diagramming non-branching nominals, a diagram of a one-word NP would look like this:



NP
|
Nom.
|
N
cats
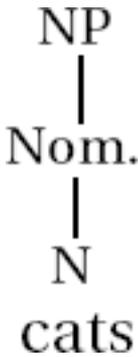
The only thing that distinguishes this case from the others is the lack of a determinative. We will call such NPs **bare** because of this absence. One way to make our analysis consistent for all cases would be to represent the determinative slot as present but not filled by any audible word. In other words, we assume that every NP is formed by combining a determinative with a nominal.

```
        NP
       / \
      /  Nom.
     /     |
  Det.     N
  [Ø]    cats
```
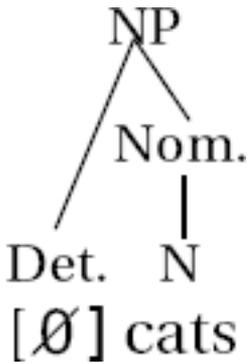
The question then becomes, what are we to make of this empty slot, which I have represented with the character ?. Much of the recent technical literature on syntax assumes that there is actually something in the slot, a silent determiner, often called a **zero determiner**. According to this view, the zero determiner behaves like other determiners in the sense that it helps specify the interpretation of the nominal. Notice, for example, that the meaning of the bare NP *cats* is not the same as the determined NP *the cats*. Of course that change in meaning is no proof that there is actually a silent determiner present in the bare NP. We could also simply say that the determiner slot in such cases is truly empty and attribute the difference in meaning to the absence of a determiner rather than the presence of a silent one. The theories that posit zero determiners typically have theory-internal reasons for doing so. But with the scheme that we are developing here, there is no particular reason to prefer one hypothesis over the other, and so we will apply Occam's razor[1] and assume that there is, in fact, no determiner. Further, in keeping with our attempt to keep our diagrams free of unnecessary clutter, we will not diagram these empty determinative slots. In other words, we will diagram

one-word NPs as shown earlier in this chapter, showing neither the nominative level nor the empty determinative.

Bare NPs do not always consist of one word. How should we represent phrases like *stray cats*? If we drew a diagram showing all our levels, it would look like this:

```
            NP
           /  \
          /   Nom.
         /    /  \
      Det.  Adj.   N
      [Ø] stray cats
```
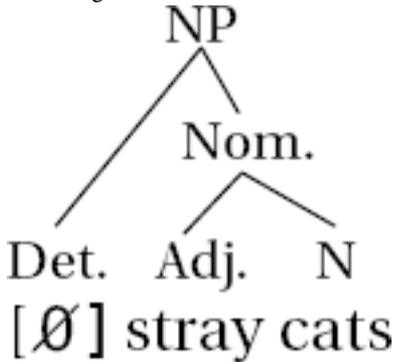
If we remove the empty determinative slot from our diagram, we get the following:

```
        NP
        |
       Nom.
       /  \
     Adj.   N
    stray cats
```
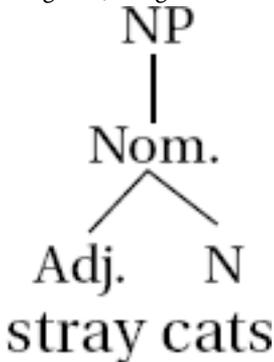
Although there's nothing wrong with this representation, we can simplfy our diagrams still further and omit the nominal level in this case too. This leaves us with a relatively simple diagram:

NP
Adj.    N
stray cats
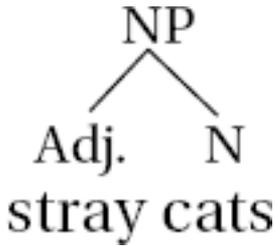
To summarize, we assume that nominals are present in all noun phrases, but the diagrams in this course will only show them if there is a branch both above and below the nominal. If you find it more helpful to show these hidden levels, then by all means put them in your own diagrams, but do so consistently.

———

Notes

[1] The principle that entities should not be multiplied beyond necessity. In other words, prefer the hypothesis that creates the fewest complications. Postulating a silent entity is more complex than postulating simple absence.

## Heads and Projection

Some students find the concept of nominals to be confusing. Remember that nominals are simply another constituent of grammar. Like other constituents such as phrases and clauses, they function as units. Like phrases, nominals also have heads. Remember that head words are important because their features play a role in how the entire phrase functions within the sentence. That's why we name the phrase after the category of its head word. One way to think of this is that the properties of the word carry over to the phrase. Looking at how this works in a tree diagram, we can think of the properties of the head word as

percolating up from the individual word to the phrase. The following diagram represents this "percolation" by showing the edges between the head words and their parent nodes as arrows.[1]
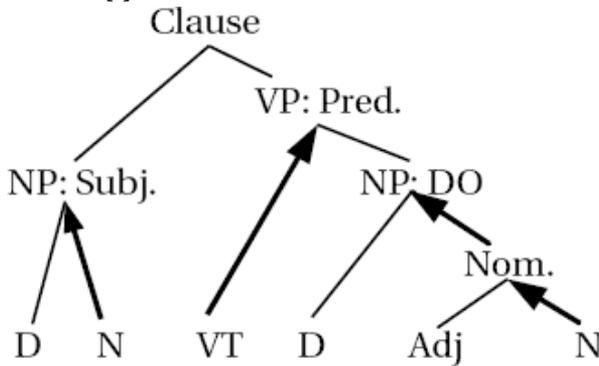


With the diagram serving as a visual metaphor, we can say that the features of the head word **project** upward in the diagram. In the case of the phrase this diligent worker, the noun worker is the ultimate head of the whole phrase, as well as immediate head of the nominal diligent worker. But in the larger sentence, worker is not the head of any higher unit. There is no arrow from the direct object to the VP because the direct object doesn't head the VP, the verb does. This observation gives us a way of conceptualizing the difference between nominals and NPs. Looking at the diagram, we can see that each phrase is the **maximal projection** of a head word. In other words, the head word's features project up to the phrase level and no further. The nominal is a constituent that has a noun as its head, but it is not the maximal projection. A unit higher up in the tree also has the same word as its head.

———

Notes

[1] For present purposes, we treat the clause as non-headed, which is the traditional assumption.

# Chapter 8. Other Phrase Types

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The most important phrase types, in that they are the typical constituents at the heart of a sentence, are the noun phrase (NP) and the verb phrase (VP). In this chapter, we will explore the structure of phrases headed by other parts of speech. Of these, prepositional phrases present the most challenges, and we will spend the most time on them. We will also look briefly at the structure of adjective phrases and adverb phrases.

## Prepositional Phrases

Prepositional phrases are often optional modifiers in the sentence rather than the central elements. Nonetheless,

prepositional phrases appear over and over, and so it's worth examining how these phrases work in some detail.

We have already defined prepositions as a class of words that most commonly express relationships of space or time, or which mark syntactic functions.

Examples of Prepositions:

*Spatial Relationship*: **behind** the house

*Temporal Relationship*: **after** the party

*Syntactic Function*: the crux **of** the matter

Like other major word classes, prepositions are the heads of their own phrases. Prepositions are typically followed by a complement. Most of the time, the object of the preposition is a noun phrase. In other words, the abstract phrase structure generally looks like this:
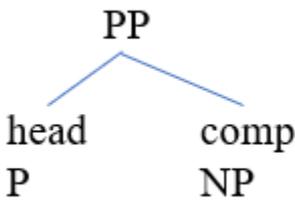


7.1. A typical prepositional phrase structure

As we will see shortly, there are exceptions to this rule, but this pattern is so typical that it is worth memorizing. If you see a word that you think is a preposition, look for the noun phrase after it.

## Functions

Prepositional phrases have a variety of functions. They can modify a noun, as in "the child *with a runny nose*," or verbs, as in "she came *from Panama*." When PPs modify verbs, they

have functions that can often be filled by adverb phrases, or occasionally by other phrase types as well. Constituents that function in this role are sometimes called **adverbials**, because these constituents answer adverb-like questions such as when, where, how, or why. Similarly, PPs that modify nouns are sometimes called **adjectivals**. But be careful with these terms. They do not imply that the PPs actually become adverbs or adjectives. Remember that *adjective* and *adverb* are categories for words, not for phrases. The terms *adverbial* and *adjectival* simply tell you what sort of constituent the phrase modifies. Because this information can also be conveyed by a tree diagram, we won't use these particular terms much, but you should be aware of them, since other works on English grammar use them frequently. We will have more to say about the various roles that PPs fill after we have finished our survey of phrase types.

## Infinitive 'to'

Not everything that looks like a preposition actually behaves like one. For example, the word *to* followed by a verb phrase forms an **infinitive phrase**. These infinitive phrases, which we will examine more closely in a later chapter, are verb phrases, not prepositional phrases. We can see this if we contrast infinitive *to* with the preposition.

(1a) My kids always want [to go] [to Disneyland].

In this sentence, the verb *want* has two constituents that begin with *to*, but the first is followed by the verb *go*, and the second by an NP. There are several ways in which the first instance of *to* behaves very differently from the second. Most prepositions, including *to*, allow the degree words *right* or *straight*. The infinitive marker does not:

(1b) My kids always want to go straight to Disneyland.

(1c) *My kids always want straight to go to Disneyland.

The infinitive marker also permits ellipsis. That is, the verb phrase after the infinitive marker can be omitted if it can be understood from context. The preposition cannot:

(1d) My kids always want to.

(1e) *My kids always want to go to.

Finally, if we say that infinitive *to* is a preposition, we must conclude that "to go to Disneyland" functions as a PP, but notice that other PPs cannot be substituted for an infinitive phrase:

(1f) *My kids always want to Disneyland.

(1g) *My kids always want by the car.

We will label the infinitive marker P, but keep in mind that we will treat it as a special kind of verb particle, and will leave the analysis of infinitive phrase structure to a later section.

## Particles

Compare the following two sentences:

(2) Ken looked up the information.

(3) Ken looked up the stairwell.

A little scrutiny will show that up does not have the same function in both sentences. For example, while we can create a cleft sentence with *up the stairwell*, we can't do the same thing with *up the information*:

(2a) *Up the information is what Ken looked.

(3a) Up the stairwell is where Ken looked.

Also, we can move up to the end of the first sentence, but not the second:

(2b) Ken looked the information up.

(3b) *Ken looked the stairwell up.

Both these rearrangements demonstrate that *up the stairwell* forms a constituent, but *up the information* does not.

Additionally, we can replace *up the stairwell* with other phrases that indicate direction:

(4) Ken looked across the courtyard.

(5) Ken looked under his bed.

(6) Ken looked away from the accident.

But we cannot do the same thing with *up* in (2) and still have the verb mean the same thing. In other words, the meaning of *looked up* as a compositional unit differs from that of looked by itself.

Finally, sentence (3) allows *right/straight* modification, but sentence (2) does not:

(2c) *Ken looked right up the information.

(3c) Ken looked right up the stairwell.

All of these differences indicate that *up* in in (3) behaves like a typical preposition, but in sentence (2) it does not. Words that function in this unusual way are called . A particle forms a one-word phrase that can, but doesn't have to, appear between the verb and the direct object. Historically, most particles derive from prepositions, but their behavior is so different from ordinary prepositions that we will classify them separately. Particles usually combine with the verb to produce a specific idiomatic meaning that is different from a verb and a prepositional phrase.

Because *up the information* in sentence (2), does not form a single constituent, we analyze *the information* as a direct object, which makes *look* a transitive verb. Thus we will diagram the sentence like this:

```
                    CL
         ／‾‾‾‾‾‾‾‾‾‾＼
        ／            pred
     subj             VP
     NP             ／‾‾‾‾＼‾‾‾‾‾＼
      |            ／      ＼      comp (d.o.)
      |           ／        ＼     NP
      |          ／          ＼   ／‾＼
     head       head       part spec head
     N          V          P    D    N
     Ken        looked     up   the  information
```
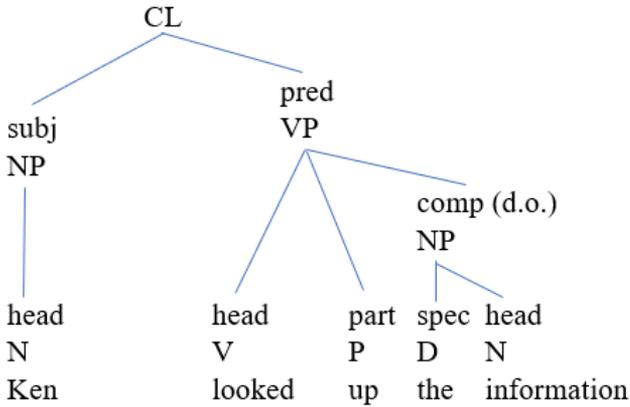
## 7.2 A phrasal verb construction

If the particle follows the complement, the diagram looks like this:

```
                    CL
         ／‾‾‾‾‾‾‾‾‾‾＼
        ／            pred
     subj             VP
     NP             ／‾＼‾‾‾‾‾‾‾‾‾‾＼
      |            ／  ＼           ＼
      |           ／    comp (d.o.)  ＼
      |          ／     NP            ＼
      |         ／     ／‾＼            ＼
     head      head  spec head        part
     N         V     D    N           P
     Ken       looked the  information up
```
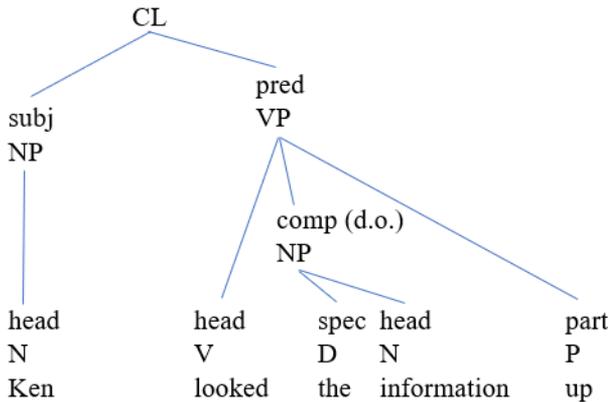
## 7.3 A phrasal verb construction with the particle after the complement

These diagrams imply that we consider particles to be separate constituents within the verb phrase. Some grammar books call verb + particle combinations "multiword verbs." That name implies that the particle is

actually part of the verb. We won't use that terminology—the particle isn't actually part of the verb. The fact that it can appear after the direct object demonstrates that. But we still must be able to distinguish verbs with particles from free combinations of verbs and prepositional phrases. Fortunately, the test is relatively straightforward. If the sentence can be transformed so that the word appears after the object, it's a particle:

(7a) The bank turned down the Johnsons

(7b) The bank turned the Johnsons down.

Notice that if the object is an unstressed pronoun, the particle cannot appear between the verb and the direct object. In this case, it must come after the object:

(7c) The bank turned them down

(7d) *The bank turned down them.

If you can create a cleft sentence by moving the word along with the noun phrase, then it's a prepositional phrase:

(8a) I put my socks in the drawer.

(8b) In the drawer is where I put my socks.

This test, though, is not definitive. If you can move the phrase, it is a PP, but some verbs are followed by prepositional phrases that cannot be moved:

(9a) Jane disposed of the remaining objections.

(9b) *It was of the remaining objections that Jane disposed.

We continue to call *of the remaining objections* a prepositional phrase because *of* cannot be moved like true particles:

(9c) *Jane disposed the remaining objections of.

A final hallmark of phrasal verbs, or verb + particle constructions, is that the meaning of the verb is often significantly changed:

(9d) The athletes ran out of the stadium.

(9e) The athletes ran out of energy.

In (9e), no literal running is occurring; instead, 'run out' is functioning as a phrasal verb, or verb + particle construction.

## Prepositions Without NP Complements

The presence of a noun phrase after a preposition is so common that traditional grammar books often state that a preposition must always be followed by a noun phrase. Certain exceptions, however, make it clear that we cannot accept that assertion.

First, prepositions will sometimes have other prepositional phrases as complements (see 9d above as well):

(10) The plane emerged from behind the cloud.

*From* and *behind* are both prepositions. But notice that *from behind the cloud* forms a single constituent. You can move it to the front of a cleft sentence:

(10a) From behind the cloud is where the plane emerged.

One way to save this phrase for a traditional definition of prepositions would be to assume that *from behind* is a complex preposition. In other words, that a two-word sequence has become fossilized and functions as a single unit. But that interpretation won't work. We can move "behind the cloud" independently of from:

(10b) Behind the cloud is where the plane emerged from.

At the same time, we cannot interpret *from* as a particle, since it does not behave like other particles. In particular, we can't move it to the end of the sentence:

(10c) *The plane emerged behind the cloud from.

The prepositional phrase *behind the cloud* is actually nested inside a larger PP, headed by *from*:

```
                    PP
                   /  \
                    comp
                    PP
                   /  \
                        comp
                        NP
                       /  \
  head      head    spec    head
  P         P       D       N
  from      behind  the     cloud
```
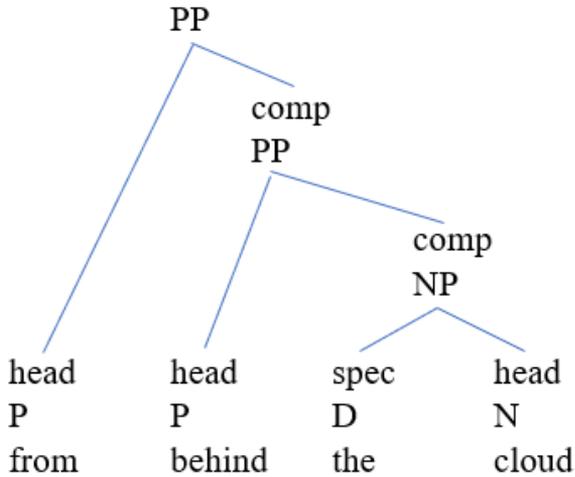
7.4 Diagram of nested prepositional phrases

A certain number of prepositions also occur with an adjective as a complement:

*Examples of P + Adj Combinations*

at first

at last

for certain

for sure

in brief

in private

of late

of old

Some prepositions can take clauses as complements:

(11) We arrived [after [the party had finished]].

Traditional grammar books classify *after* in (11) as a subordinating conjunction. But once we realize that prepositions don't need to be followed by noun phrases,

there seems to be no reason to make this distinction, and we will not do so.

Sometimes, a word that seems to be a preposition appears alone. Compare these sets of sentences:

(12a) Rivera looked *up* the stairs.

(12b) Rivera looked *up*.

(13a) I saw him *before* the party.

(13b) I saw him *before*.

Traditional grammar treats the italicized words in (12a) and (13a) as prepositions, but those in (12b) and (13b) as adverbs, once again arguing that the (b) sentences have no noun phrase following *up* and *before*, and therefore they must be some other part of speech.

But do *up* and *before* really behave like other adverbs? Notice that they can be modified by *right/straight*, like prepositions and unlike adverbs.

(12c) Rivera looked straight up.

(12d) *Rivera looked straight quickly to his left.

(13c) I saw him right before.

(13d) *I saw him right immediately.

So even though *up* and *before* appear in one-word phrases, they continue to behave like prepositions more than like adverbs. To make an analogy with verbs, some prepositions can be intransitive, and do not need any complement at all.
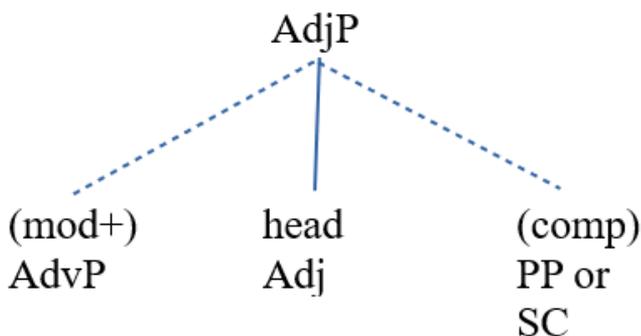
# Adjective Phrases

*Section contributors: Matt Garley and two anonymous ENG 270 students*

Properties of Adjective Phrases

Adjective phrases (AdjP) are phrases headed by adjectives, as the name implies. Like other phrases with a

head, this head is the category the phrase is named for, and there must be exactly one element functioning as the head of the phrase: an adjective. Adjective phrases also permit adverb phrases as modifiers (which precede the adjective) and occasionally have prepositional phrases or subordinate clauses as complements.

```
                    AdjP
         .  .  .  .   |   .  .  .  .
      .  .           |            .  .  .
   .  .              |                 .  .
(mod+)            head              (comp)
AdvP              Adj                PP or
                                     SC
```

7.5 The Adjective Phrase rule.

Adjectives are often **gradable**, with comparative and superlative forms. Sometimes this is done through inflectional morphology, e.g. hard -> harder (comparative) -> hardest (superlative), but sometimes with an adverb phrase, e.g. 'more' in *more difficult* or 'less' in *less desirable*. There are a wide variety of these **degree markers** that appear as adverb phrases modifying adjective phrases, e.g. *very*, *extremely*, *too*, and *really*. Another modifier often used with adjective phrases, particularly comparatives, is *a lot*. In phrases like *a lot smaller* or *loads more difficult,* the modifier has properties (like the determiner and pluralization) that make it seem like a noun phrase. The model of English syntax used in this text does not currently deal with these well.

Like verbs, only some head adjectives allow for

complements in the AdjP. Many of these are adjectives reflecting mental states like *sad* or *aware*:

(14a) I am **sad that you believe that**. (SC complement)

(14b) We are **aware of your transgressions** (PP complement)

## Adjective Phrases in the NP

Like prepositional phrases, adjective phrases generally occur as **modifiers** to noun phrases, but in contrast to prepositional phrases, which follow the head noun they modify, adjective phrases precede the head noun.

(15) An extremely curious visitor in the museum asked several questions.

In (15), 'extremely curious' is the AdjP, which modifies the head noun 'visitor' in the same way the prepositional phrase 'in the museum' modifies 'visitor'.

While adjective phrases in NPs often occur before the head noun, there are a few exceptions–cases in which the adjective phrase occurs postnominally, particularly with indefinite pronouns like 'something', 'anything', 'nothing', and 'everything'.

(16a) Let's do a fun activity.

(16b) *Let's do a fun something.

(16c) Let's do something fun.

(16d) *Let's do an activity fun.

In (16a-d), the adjective phrase 'fun' must precede the head of the NP with a common noun like 'activity', but must come after an indefinite pronoun like 'something'.

Another case where an AdjP can occur postnominally is with certain 'heavier' adjective phrases which are modified by prepositional phrases:

(17a) *A man sick

(17b) A sick man

(17c) A man sick of the same old excuses

(17d) *A sick of the same old excuses man

Looking at the noun phrases in (17a-d), we see that adding the prepositional phrase 'of the same old excuses' requires the 'heavier' adjective phrase to occur after the noun, as in (17b).

## Adjective Phrases in the VP

Adjective phrases can also occur as dependents of the verb phrase; in this case they are almost invariably the type of complement called a **predicative complement**. These occur with linking and complex verbs, like 'be', 'seem', and 'consider':

(18) The tacos are **delicious**.

(19) Your friend seems **really perplexed**.

(20) The government considers Tom **expendable**.

(21) The intense training made Rhonda **tougher and more dangerous**.

In (18) and (19), 'be' and 'seem' are linking verbs, and the adjective phrase in the predicate refers to the subject ('the tacos', 'your friend). In (20), a complex verb pattern, 'expendable' refers to the direct object 'Tom', and in (21), we see both gradability and coordination of AdjPs in another complex verb pattern.
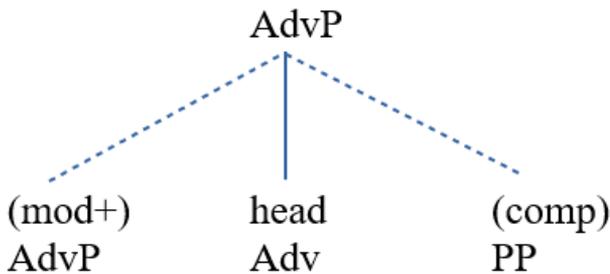
## Adverb Phrases

*Section contributors: Matt Garley and an anonymous ENG 270 student.*

While adjectives almost always have some relationship

to a noun, whether in the NP or the VP, adverbs modify many other parts of speech; classically, adverb phrases (AdvP) are understood as 'modifying' verbs in verb phrases, where they appear as adjuncts, but they can also modify adjective phrases, prepositional phrases, other adverb phrases, and both main and subordinate clauses as well.

Like all other phrases, the adverb phrase is named after its head, which must be a single adverb. In addition to the head, the adverb phrase can contain modifiers before the head (in this case, usually additional AdvPs) and, rarely, complements (usually PPs).

AdvP
```
            AdvP
        ╱    │    ╲
  (mod+)   head   (comp)
  AdvP      Adv     PP
```

7.6 The AdvP rule.
As we see in 7.6, the AdvP rule is almost identical to the AdjP rule.

Adverb phrases functioning as adjuncts of the predicate VP are notorious for their 'transportability', or their ability to move around a sentence without much effect on meaning or grammatical acceptability.

(22a) The front office has handled those accommodations for guests **routinely**.

(22b) **Routinely**, the front office has handled those accommodations for guests.

(22c) The front office **routinely** has handled those

accommodations for guests.

(22d) The front office has **routinely** handled those accommodations for guests.

(22e) The front office has handled those accommodations **routinely** for guests.

(22f) *The front office has handled **routinely** those accommodations for guests.

Note that the AdvP 'routinely' can occur in many different positions in (22a-e), though some, like (22c), might sound slightly affected to some speakers.

Adverb phrases are often modified by degree words (other AdvPs), much like adjectives:

(23) This bus is moving **very slowly**.

Rarely, adverb phrases can also take prepositional phrases as complements:

(24) **Fortunately for John**, the manager was also late to work that day.

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# Chapter 9. Clauses

Matt Garley

The *clause* is the largest unit of English syntax, and is a type of *category*, like phrases and parts of speech. In general, to analyze the syntax of an English sentence, we begin by labeling parts of speech, then organize those into phrases, which are further organized into clauses.

To review, *main clauses* (CL), sometimes called *independent clauses*, are generally the same thing we think of when we think of a 'complete sentence'–that is, a sentence with a noun phrase (NP) or occasionally a subordinate clause (SC) functioning as the *subject* followed by a verb phrase (VP) functioning as the *predicate*. A common definition of these is a clause that 'expresses a complete thought'–however, we should know by now to be wary of vague definitions like this. Checking for a subject

and a predicate (plus a finite verb, which we'll discuss later) is a better way to ensure that we have a main clause.

One way we can write the main clause rule is:

CL  –>  subj (NP or SC),   pred (VP)

Or, using a tree structure, like this:

The subordinate clause rule.

## 1. The main clause rule:
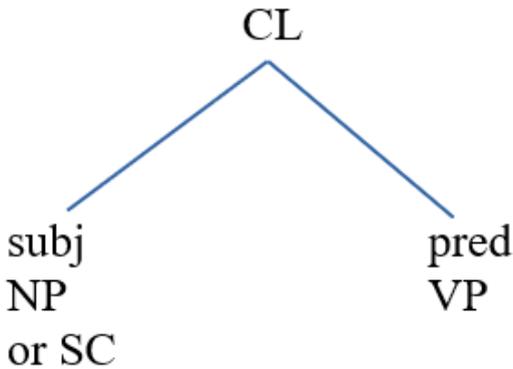


The main clause rule.

(1) John went to the store.

[John] (NP subject) [went to the store] (VP predicate)

(2) Playing video games is my favorite pastime.

[Playing video games] (SC subject) [is my favorite pastime] (VP predicate)

There is one specific situation in which a complete sentence can contain more than one main clause: when two main clauses are coordinated into one, using a coordinator like *and*, *but*, or *or*:

(3) [The Department of Agriculture issued a warning], but [dozens of people got sick from the tainted spinach].

In (3), both of the bracketed pieces are complete sentences and main clauses on their own, but the coordinator rule, which takes two of the same category and makes them into one, means that they can go together as one main clause (and in writing, one complete sentence).

There is one other major category of clause beyond the main clause; this is the *subordinate clause* (SC). In this chapter, we will examine subordinate clauses and where they are used in syntax, along with specific subcategories of subordinate clause: *relative clauses* and *finite vs. nonfinite clauses*.

## Subordinate Clauses

Subordinate clauses are also often known as *dependent* or *embedded clauses*. Many traditional grammars discuss subordinate clauses as dependent clauses, but we choose not to in this book, because it leads to confusion. In (4-6) below, the subordinate clause is placed in brackets:

(4) I know [I should have checked my bank account].

(5) I strongly believe [that the secretary embezzled funds].

(6) I really want [my car running reliably]

In (4), if the subordinate clause [I should have checked my bank account] were removed, it could stand as a sentence on its own. In (5), that's almost the case, but the subordinator *that* makes it unacceptable as a sentence. In (6), [my car running reliably] would not be able to work independently. However, all of these are subordinate clauses–for that reason, we'll drop the terms *dependent* and *independent*, and we'll discuss the differences between (4-5) on the one hand and (6) on the other as the difference

between *finite* ('tensed') and *non-finite* ('untensed') clauses later in this chapter.

Another set of terms used by a number of modern grammar texts is *adverbial, adjectival,* and *nominal clauses.* We will not use those terms in this class, as they refer to the function of the subordinate clause, which we have other terminology for. An 'adverbial clause' is simply a subordinate clause which has the same function as an adverb phrase; that is, as an *adjunct* of a VP, or as a *modifier* of an AdjP, AdvP, or PP. An 'adjectival clause' is a subordinate clause modifying an NP (we'll call these *relative clauses*, which is more traditional). A 'nominal clause' is an SC acting as the subject of the sentence, as in (2) above, or acting as the complement of a VP or PP–because we separate category from function, we don't need these specific terms, and we can recognize these as different functions of one category, subordinate clauses.

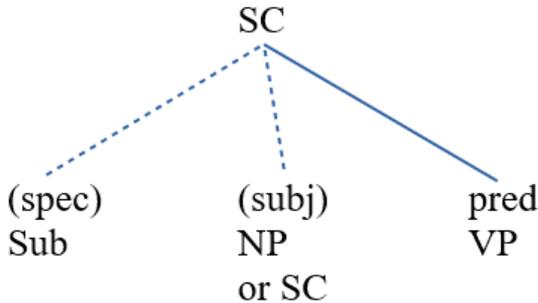Remember that we can represent the main clause rule as:

CL  –>  subj (NP or SC),  pred (VP)

A main clause always has a noun phrase or subordinate clause functioning as the subject, followed by one VP functioning as the predicate.

We can write a similar rule for the subordinate clause:

SC  –>  *spec (Sub)*,  *subj (NP or SC)*,  pred (VP)

## 7. The subordinate clause rule:

```
              SC
         .   .    \
       .    .      \
     .     .        \
   .      .          \
(spec)  (subj)      pred
 Sub     NP          VP
        or SC
```

Here, I've put the elements which are optional in italics. As you can see, there are two main differences between main clauses and subordinate clauses. First, subordinate clauses (like NPs and VPs) can sometimes have a *specifier*, which is in this case a subordinator (like who, which, that, because, since, if, whether). Remember that not every SC has a subordinator; this is important when trying to identify them. Note that sometimes, these subordinators are optional, as in (7a-b), but sometimes they are not, as in (7c-d)

(7a) I saw [that you called earlier].

(7b) I saw [you called earlier].

(7c) I wonder [if you called earlier].

(7d) *I wonder [you called earlier].

The second major difference is that, unlike main clauses, not all subordinate clauses feature an NP or SC subject. In fact, it's possible to have no subject at all in a subordinate clause.

(8) The boss saw [the customer leave].

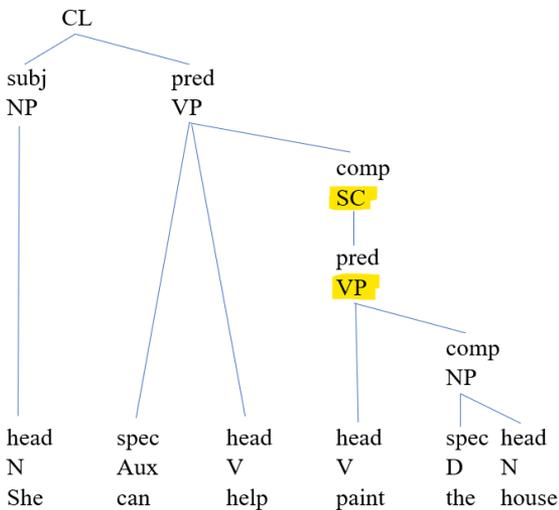(9) The boss saw the customer [that left].

If we analyze (8), we see that [the customer leave] is an SC with no specifier, but a subject [the customer] and a

predicate [leave]. In (9), however, the subordinator [that] indicates the beginning of the subordinate clause, but all we have is a predicate–[left] with no subject. Here, the subject is inferred to be 'the customer', but it does not actually appear in the subordinate clause.

This feature actually allows us to do a lot of interesting things in terms of analysis, like find explanations for sentences like (10), which appear to have two main verbs:

(10) She can help paint the house.

If we analyze [paint] as a V head of a VP, we can say that it's a subordinate clause that only has a predicate [paint the house]; and that that subordinate clause is the complement of the VP in the main clause headed by 'help'.

```
                        CL
              ┌──────────┴──────────┐
            subj                  pred
            NP                    VP
             │          ┌──────────┴──────────────┐
             │          │                        comp
             │          │                         SC
             │          │                          │
             │          │                        pred
             │          │                         VP
             │          │                   ┌──────┴──────┐
             │          │                   │            comp
             │          │                   │             NP
             │          │                   │          ┌───┴───┐
            head      spec   head         head       spec   head
            N         Aux    V            V          D      N
            She       can    help         paint      the    house
```

## Relative Clauses

*Adapted by Matt Garley from work by Jodiann Samuels, Ilvea Lezama, and two anonymous ENG 270 students.*

A *relative clause* is a specific kind of subordinate clause that modifies a noun or noun phrase. However, there are two types of relative clauses: restrictive and non-restrictive relative clauses.

the **relative subordinate clause** can be introduced by a special kind of subordinator called a relative pronoun (which we should remember is not labeled as a pronoun in our system, but rather as a subordinator) (i.e., *who, whom, which, that, where, when*). Relative pronouns, like other subordinators, are sometimes optional, but sometimes necessary to express the meaning of the subordinate clause–in the following examples, relative clauses are in brackets:

(11a) The car [that my aunt bought] is nice.

(11b) The car [my aunt bought] is nice.

(11c) The woman [who wears the burgundy dress] is nice.

(11d) *The woman [wears the burgundy dress] is nice.

In (11a-c) we have relative clauses modifying *the car* and *the woman* which have (11a and 11c) and lack (11b) relative pronouns; however, (11d) without a relative pronoun does not work.

However, what makes the relative clause identifiable is not that it is introduced by a relative pronoun but that it modifies a noun phrase. (Benner, n.d.; Huddleston & Pullum, 2005, p. 21, 25, 183).

**Restrictive and non-restrictive relative clauses**

A *restrictive relative clause* gives important information about the noun that comes before this clause (Lexico 1). When you see this type of clause, it is usually introduced with words like, *that, which, or who.* Sometimes the meaning of the sentence stays the same with or without these two words. Also, you do not need to use commas with this clause.

(12) He took the ball [that was deflated].

(13a) My nails [that I painted yesterday] are red.

A *non-restrictive relative clause* (sometimes called an *appositive relative clause*) is the opposite of a restrictive clause. This is information that could be left out of a sentence without affecting its meaning (Lexico 1). It is your choice to add the extra information or not.

(14) She bought a book for herself [which she could not wait to read].

If you take out the second part of the sentence, the meaning would still stay the same which is that the subject of the sentence bought a book for herself. However, non-restrictive relative clauses can be positioned in the middle of a sentence. When this happens, a comma goes on both sides of this clause.

(15) Michelle, [who opened the door aggressively], hit the old man in the back.

(13b) My nails, [that I painted yesterday], are red.

If you examine the difference in meaning between (13a) and (13b), we can see more clearly the difference between restrictive and non-restrictive relative clauses. In (13b), all of the speaker's nails are painted red. In (13a), there's room for the interpretation that only some of the speaker's nails were painted yesterday, and only those nails are red (with other nails possibly being other colors, and having been painted at another time).

## Finite and non-finite clauses

*Adapted by Matt Garley from work by Gurpreet Kaur and an anonlymous ENG 270 student*

Non-finite clauses are subordinate clauses which contain secondary ('non-finite') verb forms, including

participles, gerunds, and infinitives (Huddleston & Pullum 205). Non-finite clauses are often used when the subject is the same as the subject in the main clause. In addition, sometimes non-finite clauses have no subject when they function as adjuncts, which can make them hard to understand. With respect to the discussion of the terms 'independent' and 'dependent' clauses earlier, non-finite clauses are truly dependent, as they do not carry **tense** and thus cannot function as main clauses, even when taken out of their clausal context. Non-finite verbs o not indicate tense because "the verb or auxiliary carrying tense is called finite, all other forms (nontensed) are called non-finite (not restricted in terms of tense, person, and number)" (Brinton & Brinton 225).

**What are the four verb forms that appear in Non-Finite Clauses?**

The four verb forms that appear in Non-finite clauses, can be known as, to-infinitivals, bare infinitives, participles (called past participles in other texts) and gerunds (called gerund-participles in other texts) (Huddleston & Pullum 204).

| Construction | Example | Verb Form Required |
| --- | --- | --- |
| *To*-infinitival | to draw a portrait | plain form (introduced with particle *to*) |
| bare infinitival | draw a portrait | plain form |
| gerund | drawing a portrait | gerund |
| participial | drawn a portrait | participle |

(Adapted from Pullum, "Non-finite Clauses")

To-infinitivals can function as subjects (16) and complements (17) of the VP:

(16) [To err] is human.

(17) I really want [to go on vacation]

They can also function as adjuncts and modifiers as well in a number of constructions that includes, subject, extraposed subject, extraposed object, internal comp of verb, comp of preposition, adjunct in clause, comp of noun, modifier in NP, comp of adjective and indirect comp. Each will contain "to" in the sentence, but some of these complements and modifiers can be in the beginning of the sentence while some at the end of the sentence (Aljović 35).

Unlike *to*-infinitivals, bare infinitivals only appear in very few functions. They occur in the function of complements of certain verbs, with no subject.

Some examples:

(18) Can you help him *do **his homework***? [complement of modal auxiliary],

(19) I want you to help me ***clean up the bedroom*** [complement of help],

(20) We didn't ***see them*** walk in the street, [complement of make, let, see, etc.] (Aljović 36),

(21) All I did was ***close the book*** [complement of specifying be].

Participial non-finite clauses have two functions: internal comp of verb and modifier in NP. As a modifier, participials form a special kind of passive (Huddleston, Pullum 214). Finally, gerund non-finite clauses share some similar functions as to-infinitivials.

**Omissions from non-finite clauses**

Non-finite clauses do not make complete sentences as they often don't have a subject or direct object (Brinton & Brinton 275). Usually when the subject is the same as the main subject, the subject of the non-finite clause is omitted. This can also be because non-finite clauses that are dependent and when they are linked with independent

clauses which leads the subject to become omitted. When the subject becomes omitted, the process is called "ellipsis".

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# Chapter 10. Movement and Deletion

*Matt Garley*

There are some structures that we produce commonly in English that are hard to account for using the model we've learned so far. In particular, our model does not deal well with questions, where certain things seem to have moved from the places we expect them.

The most elegant solution to this is to say, well, this isn't the real structure–instead, our model works on something we'll call *deep structure*–a version of certain sentences that we propose exists before things move around and we get to the *surface structure*, which is the version we say or hear. So we need some rules for movement!

In this chapter, we will deal with three main types of movement:

1) Subject-Aux inversion (swaps Auxiliary in front of the subject)

2) WH-movement (for content questions and certain embedded clauses)

3) Fronting (adjuncts moving to the front of the sentence for stylistic purposes)

## Subject-Auxiliary Inversion

*Adapted by Matt Garley from work by Paul Junior Prudent and Autumn Matthews.*

Subject-Auxiliary Inversion, also called Subject-Aux inversion, or simply SAI, is one of the types of movements in English grammar. In an ordinary sentence, the subject comes before the predicate VP, and inside that predicate, the Aux (if there is any) comes before the V. But there are situations where the Aux jumps out of the VP and comes before the subject of the sentence. Subject-Aux inversion is when the auxiliary verb comes before the subject. That is when the movement happens (Huddleston & Pullum 68).

**Yes-no questions**

One of the situations where Subject-Aux Inversion happens is in one of the two main types of questions in English, so-called 'yes-no' questions, that is, questions for which the answer is expected to be 'yes' or 'no'. In English grammar, the question structure requires the auxiliary verb to precede the subject question (Lobeck et al. 117). For example, in the question *"has he seen the movie?"* the auxiliary verb *"has"* comes before the subject *"he"*. In the question *"have you been to Haiti ?"* the subject *"you"* comes after the auxiliary verb *"have"*.

Subject-aux inversion can work with any auxiliary, including modals, Aux *have*, Aux *do*, and Aux *be*.

The verb "be" also allows the Subject-Aux inversion, **even when it is not an auxiliary verb!** For example, in the question *"are you listening to me?"* the auxiliary verb *"be"* comes before the subject *"you"*. In the question *"is she going to Haiti?"* the subject *"she"* comes after the auxiliary verb *"be"*. These previous examples show the unique property of the verb "be", because "be" can act like an Auxiliary verb even if it is a main verb itself ("Linking Verbs"). This also used to be true of *have*, and we see remnants of this in fixed phrases like *"have you no shame?"*. However, it would be strange today to sit in a diner and say something like *"have you no decaf?"*

(1a) Deep Structure: Tasha is playing uno

(1b) Surface Structure: Is Tasha playing uno?

(2a) Deep Structure: The teacher will bring cupcakes to class tomorrow

(2b) Surface Structure: Will the teacher bring cupcakes to class tomorrow?

(3a) Deep Structure: You drink soda

(3b) Surface Structure: Do you drink soda?

In (3a-b) we also see that if no auxiliary (or 'be') is present in the deep structure, the dummy auxiliary *do* is filled in; the formation of yes-no questions is one of the main uses of this auxiliary construction.

**Negation**

The subject-aux inversion can also happen in a when using negation or to express surprise or shock about a situation or a fact. There are expressions when placed at the beginning of a sentence that require the subject-aux inversion (Brinton & Brinton 233). Expressions that begin with a negative like:

Not only:

(4) Not only *was he* drafted, he was also the number one pick.

Not once:

(5) Not once *did he* pass the ball.

At no time:

(6) At no time *did I* say yes to your demand.

Nor:

(7) I did not think my dad would ever get a new phone, nor *did I* expect him to

Under no circumstances:

(8) Under no circumstances *should you* touch the video game

In all of the sentences above the negative expression at the beginning forces the subject-aux inversion.

**Emphasis**

In this case, the subject-aux inversion happens in a sentence to emphasize something specific. While it could be about something surprising or shocking, the more important thing in this situation is the emphasis on a situation or a fact (Brinton et al. 73). It happens sometimes with words like *rarely, never, little...* When these words are placed at the beginning of a sentence, they change the structure into a subject-aux inversion. Most of these are somewhat idiomatic, and this is not likely to be productive in making new phrases in English.

Rarely:

(9) Rarely *does she wear heels.*

Little:

(10) Little *did I* know.

There are also some other expressions which add the emphasis effect on something specific in a sentence. These expressions are used to make a statement look stronger or to give the sentence more emphasis.

*(11)* Man, *is he* stubborn.

This sentence may sound like a question *"Is he stubborn?"*, but in fact the expression *"Man"* at the beginning in the sentence puts the emphasis on how *"he's stubborn"*. This is not a question, but instead a stronger statement.

# WH-Movement

The second kind of movement this chapter will cover occurs with the other major category of questions in English, i.e., *content* questions. Unlike yes-no questions, this kind of question requests a more detailed answer, and begins with one of the classic 'question words'–most of which begin with WH. These are *who, whose, what, which, where, why, when,* and (the odd one out, in terms of spelling) *how.* We can analyze WH-questions in the same way as yes-no questions, by recourse to *deep structure.*

The basic mechanism of WH-movement is that regardless of its normal place in the clause, a WH-word which is being questioned must move to the front of the clause.

In cases where the subject is the question word, like "Who did this?", this is trivial–the subject is already at the front of the sentence, so it makes no difference if the WH-word moves to the front.

In other cases, if the WH-word moves past the subject in moving to the front of the clause, it also triggers SAI if it's in the main clause.
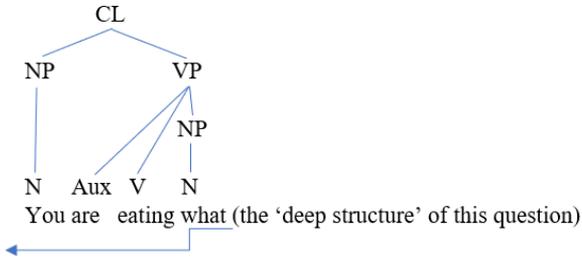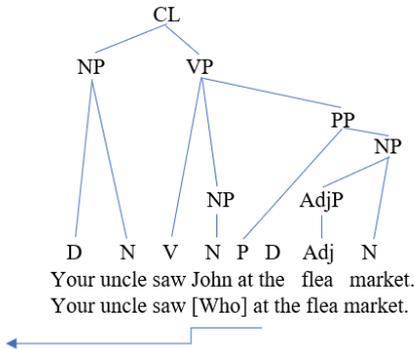
N     Aux  N    V
**What are   you eating?**

```
              CL
         ╱          ╲
      NP              VP
      │             ╱    ╲
      │                   NP
      │                   │
      N    Aux  V     N
      You are   eating what (the 'deep structure' of this question)
```

Fig. 1 How 'What are you eating' is derived from 'You are eating what'

Who did your uncle see at the flea market?

Deep structure:

```
                    CL
              ╱            ╲
           NP               VP
          ╱  ╲            ╱    │   ╲
                                    PP
                                   ╱   ╲
                                        NP
                         NP      AdjP
                         │      ╱    ╲
        D    N   V   N  P  D   Adj   N
        Your uncle saw John at the   flea   market.
        Your uncle saw [Who] at the flea market.
```

[Who] Your uncle saw at the flea market.

Who your uncle did see at the flea market.

Who did your uncle see at the flea market?

Fig. 2 How "Who did your uncle see at the flea market" is derived from "Your uncle saw who at the flea market"

A special note on 'whose' and 'which': These do not move by themselves, but act as determiners, bringing an entire noun phrase with them:

(12a) Deep structure: The party will be at **whose house**

(12b) intermediate form: (WH-movement) **Whose house** the party will be at

(12c) Surface structure: (WH-movement and SAI) **Whose house will** the party be at?[1]

## Fronting

The last, and simplest, form of movement is called *fronting.* In general, adjuncts in the VP can be fronted, or moved to the beginning of the sentence before the subject.

Remember that an adjunct is a name for a specific function that dependents of the VP, particularly AdvP, PP, and SC, can have.

Complements are *licensed by the verb*–remember, they depend on whether the verb can be transitive, linking, complex, but adjuncts are not—they can appear in any sentence.

Adjuncts can optionally be fronted. This is not required, and is usually done for stylistic purposes.

An adverb phrase being fronted:

(13a) John takes a nap at 3:00 **usually**.

(13b) **Usually**, John takes a nap at 3:00.

Prepositional Phrase:

(14a) Joan lifted the car **with great strength**

(14b) **With great strength**, Joan lifted the car.

---

1. Many traditional grammars encourage you not to end a sentence with a preposition. I think my friends would look strangely at me if I said "At whose house will the party be?" In fact, I might not even get invited.

Note that unlike adjuncts, complements can't be normally be fronted, except in a few dialects like New York Yiddish English when focusing or stressing the complement (usually expressing surprise or disbelief) :

(14c) *? **The car**, Joan lifted?!?!

Fronting can also occur with an adjunct subordinate clause, but not generally a complement subordinate clause:

(15a) James used Febreze **because he was out of clean clothes**.

**(15b) Because he was out of clean clothes**, James used Febreze.

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This is where you can add appendices or other back matter.