9 Phrases

KEY CONCEPTS
Definition of ***phrase***
Modification and complementation
Adverb phrases
Prepositional phrases
Adjective phrases
Noun phrases
Verb phrases

INTRODUCTION

No doubt you have noticed that our discussion of parts of speech required us to consider the phrases they occurred in. Although traditional grammars often treat word classes apart from their roles in larger structures, it is really not possible to do so. For one thing, we cannot study a word's functions without viewing it in a larger setting. For another, a single word may constitute a phrase. For instance, a noun phrase may contain just a noun—its head. Likewise, a verb phrase may contain just a verb. Phrases, then, are units of one or more words. They are the lowest syntactic unit.

It is important for us to know about phrases and to be able to distinguish them from words and clauses. This knowledge is essential in at least the two following situations.

Journeyman writers often produce **fragments**, that is, parts of sentences punctuated as if they were sentences. These fragments are rarely just random strings of words; rather, they are typically internally grammatical. They are in fact phrases. Fragments are objected to because they are not the type of expression that more experienced writers would use in the context. They are often a reflection of linguistic patterns used in speech and indicate that the writer has not yet mastered the stylistic differences between the spoken and written modes.

Languages differ in the orders they impose on sequences of words. For example, in English (and many other languages), adjectives typically precede the nouns they modify, whereas in Spanish (and many other languages), adjectives typically follow the nouns they modify. Language learners must learn the orders expected in the target language. Their teachers must know the ordering possibilities and be able to articulate them in ways their students can learn from.

As we examine phrases, then, we study how words relate to each other in the smallest of the larger linguistic structures. In our chapters on Basic

Clause Patterns and Modifications of Basic Clause Patterns, we examine the ways in which phrases form clauses. Our discussion here will treat the five major phrase types in English:

1. Adverb Phrase (AdvP)
2. Prepositional Phrase (PP)
3. Adjective Phrase (AP)
4. Noun Phrase (NP)
5. Verb Phrase (VP)

We will discuss each of the five types in a similar way. First, we will examine their basic functional patterns; then how those functions are realized by structural possibilities; and, where appropriate, we will explore some of the complexities associated with each type of phrase. Whenever such complexities lead us to topics considered in another chapter, we will provide a brief commentary and defer fuller treatment to a later time.

WHAT IS A PHRASE?

Traditionally "phrase" is defined as "a group of words that does not contain a verb and its subject and is used as a single part of speech."

This definition entails three characteristics: (1) it specifies that only a group of words can constitute a phrase, implying that a single word cannot; (2) it distinguishes phrases from clauses; and (3) it requires that the groups of words believed to be a phrase constitute a single grammatical unit. We accept (2) and (3), but must revise (1).

We reject the claim that single words cannot constitute phrases. First, a word and a phrase may play identical grammatical roles in a clause, as (1) and (2) demonstrate:

(1) Most of the members of the genus avis fly.
(2) Birds fly.

Most of the members of the genus avis is the subject of (1) and *birds* is the subject of (2), showing that single words and phrases can function identically in clauses. There are two inferences that we can draw from this fact: (a) a subject can consist of either a single noun or a noun phrase, or (b) subjects are phrases, and so whatever functions as a subject must be a phrase. If we assume (a), then whenever we define *subject* (and any other grammatical function, such as predicate, direct object, indirect object, etc.), we must always specify that it can be expressed as a word or as a phrase. Linguists

would say that this formulation is more complex than it needs to be because it fails to articulate a more general pattern. The broader generalization is that these grammatical relations are always expressed as phrases and phrases can consist of either a single word or a unified group of words. Below, we will show how and when words can be phrases.

Second, single words and phrases may be replaced by identical proforms. We can replace the subjects of both (1) and (2) with *They*:

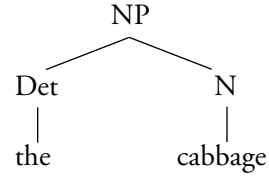
(1) a. They fly.
(2) a. They fly.

Again, there are two inferences we can draw: (a) pronouns can replace either a noun or a noun phrase, or (b) pronouns replace phrases. Again, (b) is more general, but it does require us to specify when words can function as phrases.

A single word may be a phrase when it is the **head** of that phrase. The head of a phrase is the phrase's central element; any other words (or phrases) in the phrase orient to it, either by modifying it or complementing it. The head determines the phrase's grammatical category: if the head is a noun, the phrase is a noun phrase; if the head is a verb, the phrase is a verb phrase, and so on. The head can also determine the internal grammar of the phrase: if the head is a noun, then it may be modified by an article; if the head is a transitive verb, it must be complemented by a direct object. Heads also determine such things as the number of their phrases: if the head of an NP is singular, then the NP is singular; if the head is plural, then the NP is plural. Crucially, the head of a phrase may occur alone in the phrase, that is, without modification or complementation.

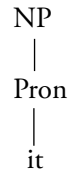
Let's look a little closer at what expressions may be replaced by pronouns. Specifically, let's test the claim made in many textbooks that pronouns can replace nouns or noun phrases. Consider (3):

(3) Fooster hates the cabbage.



If we replace the NP *the cabbage* in (3) with the pronoun *it* we get the perfectly grammatical (3a):

(3) a. Fooster hates it.

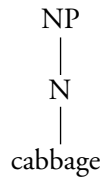


However, given the typical textbook definition of pronoun as a word that can replace either nouns or noun phrases, we should be able to replace just the noun *cabbage* in (3) with *it*. However, when we do so, we create the wildly ungrammatical (3b):

(3) b. *Fooster hates the it.

So, why is (3a) fine but (3b) is not? To create (3a) we replaced the entire phrase *the cabbage*, but for (3b) we replaced only a part of the phrase. It appears that when we pronominalize we must replace an entire phrase with a pronoun, not just a random piece of it. It follows that if we can successfully replace an expression with a pronoun, then that expression must be a complete phrase. To check this, consider what happens when we replace *cabbage* in (3c) with a pronoun; we get the grammatical (3d):

(3) c. Fooster hates cabbage.
(3) d. Fooster hates it.



So *cabbage* is just a noun in (3) and therefore cannot be replaced by a pronoun; but in (3c) it is both a noun and a noun phrase (as the diagram shows), and so can be pronominalized, proved by the fact that (3d) is grammatical.

Let's add just one more test to the two tests for phrasehood we've already used (capable of functioning as a grammatical relation and capable of being replaced by a pronoun): if an expression can be moved from one part of a sentence to another without any internal reorganization, then that expression is a phrase. We can use our *cabbage* sentences for this test too.

We can successfully move *the cabbage* in (3) to the left of the subject, giving us:

(3) e. The cabbage, Fooster hates.

But when we try to move just the N *cabbage*, the result is ungrammatical, just as when we tried to pronominalize *cabbage* in (3):

(3) f. *Cabbage, Fooster hates the.

Analogously, when we move *cabbage* in (3c) in which *cabbage* occurs alone, the result is also grammatical:

(3) g. Cabbage, Fooster hates.

So, we've applied three tests—ability to function as a grammatical relation, pronominalization, and movement—and all three have yielded the same results: a phrase may consist of a unified group of words, or of a single word as long as that word is the phrase's head.

There is an important methodological precept here: the more arguments you can marshal in favor of your analysis and definitions, the more confidence you can place in them.

Our new, improved definition of "phrase": *a phrase is a grammatical unit, intermediate between a word and a clause, which may consist of just one word (its head) or its head and expressions (including other phrases) that modify or complement it* (see below). This definition retains the traditional distinctions between word and phrase and between phrase and clause. It adds the requirement that phrases have heads and allows a phrase to consist of just its head.

In considering word classes, we examined the most important ones first. In this chapter, we will present the three less complex types first— adverb, prepositional, and adjective. The reason for this seemingly backwards approach is that the two major phrase types—noun phrases and verb phrases—often include the minor types as subparts. But first we must make a brief detour to discuss the important distinction between modification and complementation.

MODIFICATION AND COMPLEMENTATION

The head of a phrase may be modified or complemented by other words, phrases, or sentences within the phrase. We begin with complementation as it is perhaps the more easily understood.

When one element in an expression creates the grammatical expectation that another expression will also occur, the expected element **complements** the expecting element. For example, transitive verbs create the expectation of an object, as in *Sheila fractured* [*her ankle*]; bitransitive verbs create the

expectation of two objects, as in *Sally gave* [*her*] [*a shot of morphine*]; certain other verbs create the expectation of two complements, though one or both need not be an NP, as in *She put* [*her first aid kit*] [*away/in the truck*]. Generally, although verbs (in English) require a subject, subjects are not usually said to complement the verb.

Verbs are the primary complement-requiring elements in language, but other parts of speech may require complements too. Prepositions typically require an NP complement—*on* may be complemented by a phrase denoting notions such as location or time, as in *on* [*the pavement*], *on* [*your mark*], *on* [*time*]. Certain nouns may be complemented by clauses, as in *the belief* [*that diseases are caused by evil spirits*].

Modification occurs in a construction in which an expression is accompanied by an element not grammatically required by it. For example, because nouns do not typically require adjectives, *eager* modifies *fans* in *eager fans*. Verbs and adjectives do not typically require that they be accompanied by adverbials, so *violently* modifies *swore* in *swore violently*, and *disappointingly* modifies *slow* in *disappointingly slow*.

Modification may be restrictive or non-restrictive. When one word restrictively modifies another, the modifier restricts the potential reference of the modified. For example, in the phrase *long books* the adjective *long* restrictively modifies the noun *books*. If the word *books* were to occur alone, then it could potentially refer to any and all types of books. The modifier restricts the reference of the phrase to just those books that are long. Nouns may have many modifiers, as in *tall, black, neutered, male, domestic, short-haired cat*. Here we have six modifiers, each restricting the potential reference of the word *cat*. The result of piling up these modifiers is that the actual referent of the phrase must satisfy all of them—it must be a cat that is tall, black, neutered, male, domestic, and short-haired. Each modifier acts like a criterion that the ultimate referent(s) of the phrase must satisfy.

There are two main classes of modifying words in English—adjectives and adverbs. Adjectives modify nouns and adverbs modify pretty much everything else—verbs, adjectives, other adverbs, and sentences. They modify these in much the same way as adjectives modify nouns—by adding criteria that must be met. For example, in *ran quickly*, *quickly* modifies *ran* and therefore requires that whoever ran didn't run in any old way, but did it quickly. Other examples include expressions like *take regularly*, *needs help immediately*. Likewise, *intensely* in *intensely bright* requires that the brightness be intense (cf. *specially packaged*, *medically appropriate*). *Irritatingly* in *irritatingly slowly* requires that whatever is going on must not only be going on slowly, but so slowly as to be irritating to someone (cf. *extremely cleverly*).

Unfortunately in *Unfortunately, he didn't make it back* requires not only that he didn't make it back, but also that (the speaker feels that) it is unfortunate that he didn't (cf. *Sadly, she's no longer with us, Hopefully, it won't happen again*).

Nouns may be restrictively modified by clauses, called relative, adjective, or defining clauses, bolded in *the man* ***who knew too much***. Notice that there is no comma between the noun *man* and the beginning of the restrictive relative clause. Sentences may be restrictively modified by adverbial clauses, bolded in ***Though he liked her a lot****, he was afraid to ask her for a date*. Here a comma is preferred, especially if the adverbial clause is relatively long.

Notice that none of the modifiers are required or implied by the words, phrases, or sentences they modify. These words, phrases, and sentences would be grammatically complete without the modifiers—though of course adding or removing modifiers affects the meaning and potential referents of the modified elements.

Non-restrictive modifiers, or **appositives**, add information that is not essential for the identification of the referent of the phrase so modified. In written English, appositives are set off by commas—*The President of the US****, who is in his 7th year in office,*** *has only one more year to serve*. In cases like this, the writer assumes that the reader will know who the President of the US is and so does not need the appositive information to identify him. Nonetheless, the writer adds the information that the President is in his 7th year in office as a sort of secondary predicate in addition to the primary one, namely, that he has only one more year to serve. In spoken English, appositives are set off from the remainder of the sentence by brief pauses (hence the commas) and a drop in pitch. From a writer's or speaker's point of view, it is essential to decide whether the audience does or does not need the modifier to identify the referent of the phrase.

THE ADVERB PHRASE (ADVP)

The following are examples of **adverb phrases**:

(4) a. adamantly (adverb alone)
b. quite reluctantly (adverb modified by intensifier)
c. extremely clumsily (adverb modified by degree adverb)

From a functional point of view, each AdvP must contain a head, which must be an adverb; this adverb may be modified by an **intensifier**, as in (4b), or by a **degree adverb**, as in (4c). Examples of these are listed in Table 1.

very	extraordinarily
quite	reasonably
rather	particularly
too	extremely
more/most	terrifically
only	
somewhat	

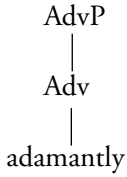
TABLE 1: TYPICAL INTENSIFIERS AND DEGREE ADVERBS

The following formula encapsulates the functional properties of AdvPs:

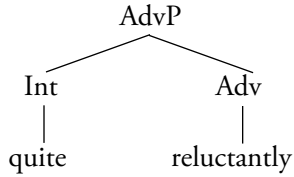
(5) (Modifier) + Head [In formulae like this, parentheses indicate optional elements.]

The **structures** associated with (4a), (4b), and (4c) may be represented by the following trees:

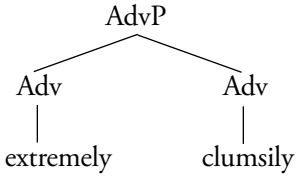
(6)a.



(6)b.



(6)c.



As we noted for single adverbs (i.e., adverb phrases composed of just a head adverb), adverb phrases are relatively movable within a sentence, although the changes in position may be accompanied by changes in meaning, for example:

(7) a. Frankly, my dear, I don't give a damn.
b. My dear, I frankly don't give a damn.
c. My dear, I don't give a damn, frankly.

(8) a. Luckily, his fall was broken by deep snow.
b. His fall was broken by deep snow, luckily.

Exercise

1. For each of the following AdvPs identify its head adverb. If it has a modifier, identify that and determine its part of speech.
   a. quickly
   b. very quickly
   c. particularly extravagantly

2. Draw brackets around each adverb phrase in the sentences below. Then underline the head adverb.
   a. They surrendered peacefully.
   b. I go to the movies quite frequently.
   c. Esmeralda acted awfully strangely.
   d. Very slowly, we edged down the mountain.
   e. Somewhat reluctantly, she returned home a week early.

3. Draw a tree diagram like those in (6) above for each of the AdvPs you identified in the sentences in Exercise (1) above.

Before we move on, we want to broach the topic of how phrase structure trees are created. They are said to be "generated" by **phrase structure rules** (PSRs) such as:

(9) AdvP ——> (Int) Adv

This is to be read as: An adverb phrase (AdvP) consists of (——>) an optional intensifier followed by an adverb.

As we know, however, adverbs may be modified by either an intensifier or another adverb, for example, *extremely quickly.* We represent this choice by placing the items to be selected from in curly brackets: {Int/Adv}. If all these elements are optional, then the curly brackets are put in parentheses: ({ }). So, a more complete PSR for AdvPs would be:

(10) AdvP ——> ({Int/Adv}) Adv

We read this as: an AdvP consists of an optional intensifier or adverb and an adverb.

A note on "Adverbial"

The term "adverbial" refers to adverb phrases and all other expression types that function in the ways that adverb phrases do, namely, as modifiers of almost all parts of speech except nouns. Besides adverb phrases, prepositional phrases (bolded), e.g., *She drove **with great caution*** (cf. *She drove **cautiously***), noun phrases (bolded), e.g., *They do that **a lot***, (cf. *They do that **frequently***), and deictic words (bolded), e.g., *There's nobody **here*** may function as adverbials.

THE PREPOSITIONAL PHRASE (PP)

The following are typical prepositional phrases:

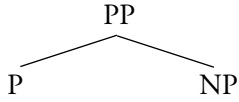
(11) a. on the waterfront
b. of human bondage
c. beyond the blue horizon
d. from the halls of Montezuma
e. with malice toward none

From a functional point of view, PPs are very simple: they consist of a head preposition and an object or complement, which is typically an NP. We can represent this as:

(12) Head + Object

From a structural point of view, each of the PPs in (11) consists of a preposition followed by a noun phrase, and we can represent their basic structure as:

(13)



This phrase structure tree is generated by the following PSR:

(14) PP ——> P NP

We read this PSR as: a PP consists of a P followed by an NP. Noun phrases are discussed in more detail later in this chapter. All you need to know now is the list of single- and multi-word prepositions presented in the chapter on Minor Parts of Speech.

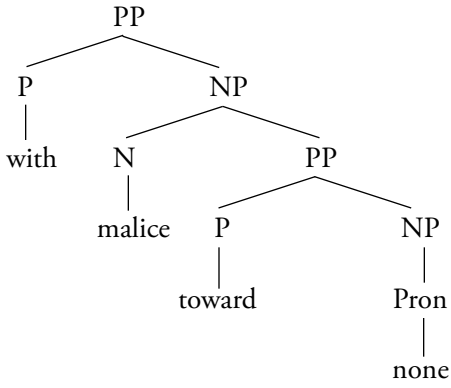
Prepositional phrases are relatively uniform constructions: spot a preposition and the NP that immediately follows it, and you can be fairly certain that you have identified a PP. However, you should recall that some apparent prepositions are actually particles and that others may be subordinating adverbial conjunctions.

Exercise

Draw a tree diagram for each of the phrases (11a-c).

In (11d,e) we find two PPs, one inside the other. You can visually represent (11e) as:

(15)



It may seem odd to treat a preposition as the head of a phrase, because traditional grammar may have persuaded us to regard the preposition as insignificant. In fact, prepositions express meanings that encompass the entire range of key semantic relations in a sentence. Another sign of the importance of prepositional phrases is their ability to appear in so many structures—within noun phrases, verb phrases, and adjective phrases.

The second part of the PP is a noun phrase that functions as its complement or object. This terminology also suggests the central role of the preposition within its phrase. Just as verbs may govern direct and indirect object NPs, prepositions govern object NPs.

Exercise

1. Here are several prepositional phrases. For each, identify its head P and NP complement/object:

a. on the ropes
b. under the boardwalk
c. on a slippery slope
d. around midnight
e. beyond the horizon

2. In the sentences below, draw brackets around the prepositional phrases. Circle each preposition and underline its NP object. Be sure to note where PPs contain other (embedded) PPs. Can prepositions take objects that are not NPs?

a. I put the dynamite in a safe place.
b. In Warden's house, smoking is not allowed.
c. I thank you from the bottom of my heart.
d. Hilda peeked from behind a tree.
e. After all of his warnings about the dangers of cigarettes, Benjy consumed a cut of meat with a huge amount of cholesterol.
f. Oscar resigned in the face of increasing evidence of his association with disreputable companies.

3. Using the movement test, show that the italicized sequences are phrases:

a. *In times of danger,* everyone must rally behind the leader.
b. *At the end of the day,* he is always very tired.
c. It is easy to identify phrases *with examples like these*.

4. From the discussion above, identify the ideas that show how a preposition is the head of its phrase. Consider also how the following sentences add further support for this claim:

a. Sheila hit the ball almost into the parking lot.
b. Werner spilled oil all over his new jacket.

Try to think of other sentences similar to these. How do they call for a revision of our formal and functional formulas for PPs?

Prepositions are often simply characterized as linking words, and this is an accurate characterization as far as it goes. However, we'd like to have a more complete concept of how they work. Typically prepositions have

meanings and these meanings connect their objects to other parts of the sentences in which they occur. For example, in (16), *to* indicates that its object NP represents the recipient of the money:

(16) Tony donated $10,000 to the hospital.

In (17), *for* indicates that the cardiac laboratory is to be the beneficiary of the money:

(17) The money was for the cardiac laboratory.

Notions such as recipient and beneficiary are called **semantic roles**, about which we will have much more to say in our chapter on Basic Clause Patterns.

THE ADJECTIVE PHRASE (AP)

Each of the following is an AP:

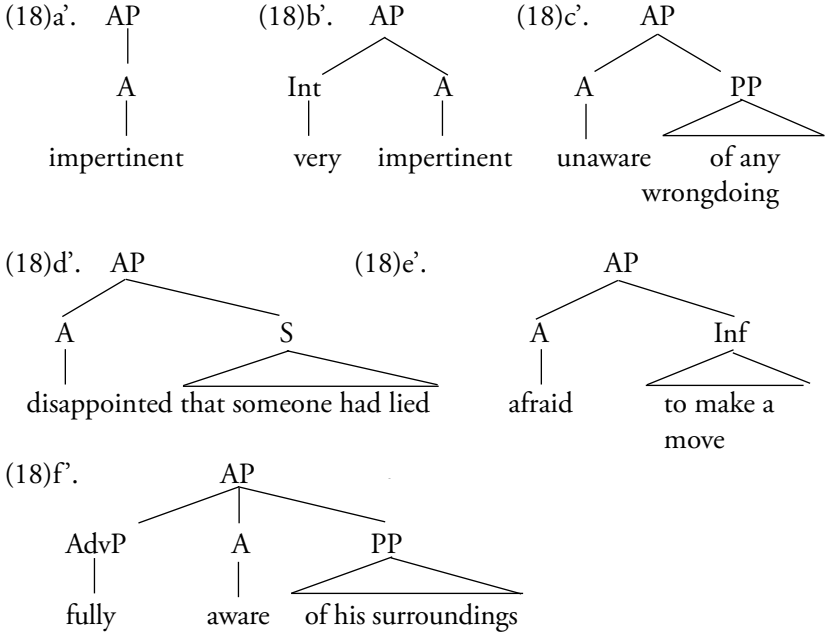
(18) a. Impertinent (adjective alone)
b. Very impertinent (intensifier + adjective)
c. Unaware of any wrongdoing (adjective + PP)
d. Disappointed that someone had lied (adjective + clause)
e. Afraid to make a move (adjective + infinitival)
f. Fully aware of his surroundings (adverb + adjective + PP)

From a functional perspective, adjective phrases may be analyzed as:

(19) (Modifier) + Head + (Complement)

The modifiers may be either intensifiers or degree adverbs, just as in AdvPs; the complements may be PPs, finite clauses, or infinitivals. Only some types of adjectives take complements—mainly those that denote mental or emotional states, e.g., *aware*, *afraid*, *sorry*, *disappointed*, *astonished*, *hopeful*, *sad*.

We can represent the structures of (18a-f) as the following trees, respectively:



These trees can be generated by the following PSR:

(20) AP ——> ({Int/AdvP}) A ({PP/S/Inf})

We read this as: an adjective phrase consists of an optional intensifier or adverb phrase, an adjective, and an optional PP, S, or infinitival.

Exercise

1. Each of the following is an adjective phrase. Identify its head adjective, any modifiers, and any complements. For each modifier and complement you find, indicate its part of speech.

   a. sad
   b. quite attractive
   c. extremely volatile
   d. disappointed that he has to leave
   e. eager to get on with his life

2. In the following clauses, draw brackets around each AP, underline the head adjective, and identify any modifiers and/or complements and provide their parts of speech. Don't forget to use formal criteria to

check that the word you underline actually is an adjective.

a. The undernourished animals recovered.
b. My boss is happy with my work.
c. Mindy was completely unaware of his ability to dance.
d. The reasons for his sudden resignation eluded even the most astute observers in the company.
e. Afraid of real combat, George bought a large squirtgun.
f. George is extremely generous to his wealthy friends.

3. For each of the following adjectives, create at least three APs: *aware, afraid, sorry, disappointed, astonished, hopeful, sad*. In the APs you create, include at least one PP complement, one finite clause complement, and one infinitival complement.

4. Draw a tree diagram with full detail (i.e., include part of speech labels for each word and internal phrase) for the expression *very sure of himself*.

APs have three main functions. First, they may directly modify nouns. In this function they are often called **attributive adjectives**, as in *friendly dogs*.

Second, APs may complement subject NPs. In this function they are referred to as **predicative** or **subject complements.** Predicate adjectives occur after verbs of the *be-become-seem* type.

(21) a. Faust is *anxious*.
b. Mephistopheles became *despondent*.
c. Wagner seems *puzzled*.

Third, an AP may function as an **object complement**, that is, as the complement of the object of a clause:

(22) a. We consider him *foolish*.
b. Your attitude makes me *angry*.

Adjectival object complements are particularly common in certain set phrases, such as *make X clear*. Table 2 contains a sample of such set phrases.

cut X short	pack X tight
drain X dry	push X open

keep X loose	put X straight
leave X clean	set X right
make X plain	shake X free
wash X clean	work X loose

TABLE 2: ADJECTIVES AS OBJECT COMPLEMENTS (X = DIRECT OBJECT)

THE NOUN PHRASE (NP)

We begin our discussion of noun phrases (NP) with NPs that consist of just a single word and discuss their functional and then their formal properties. Then we will move on to various types of multi-word NPs.

Simple NPs: single word phrases

The left-hand column in Table 3 lists categories of single words that may constitute an NP, and which must consequently be its head; the italicized expressions in the right-hand column in Table 3 are examples of single-word NPs belonging to the corresponding category.

CATEGORY OF HEAD WORD	EXAMPLE
Noun, count	*Wombats* are playful.
Noun, non-count	*Cabbage* is nutritious.
Subject and object personal pronouns	*They* saw *her*.
Genitive personal pronoun	*Mine* are chartreuse.
Indefinite pronoun/quantifier	*None* were found.
Wh-word/pronoun	*Who* placed the call?

TABLE 3: SINGLE-WORD NPS

All of the word categories in the right-hand column are noun-like, so in order to abbreviate and to simplify matters, let's refer to them all as **nominals**. Every NP, like every other phrase, must have a head, and any nominal can be the head of an NP.

From a structural point of view, we can represent the possibilities in Table 2 in the following simplified tree structure:

(23) a. NP
|
Nominal

This tree is generated by the PSR:

(23) b. NP ——> Nominal

We can read this as saying that an NP consists of any kind of nominal.

More complex NPs

We begin this section by presenting two very general functional formulas for NPs. We give these two because it would be confusing to combine them into a single formula.

(24) a. (Premodifier*) + HEAD + (Postmodifier*)
(Asterisks denote elements that may appear more than once.)
b. (Complement) + HEAD + (Complement)

Formula (24a) states that a noun phrase must contain a head word (which, of course, must be a nominal) but need not contain anything else. If the NP has more elements than the head, it may contain one or more premodifiers (modifiers that precede the head) and/or one or more postmodifiers (modifiers that follow the head). This formula thus abbreviates several possibilities:

(25) a. Head
b. Premodifier(s) + head
c. Head + postmodifier(s)
d. Premodifiers(s) + head + postmodifiers(s)

Formula (24b) states that a noun phrase must contain a head, which may be preceded or followed by a complement. It also abbreviates several possibilities:

(26) a. Head
b. Complement + Head
c. Head + Complement
d. Complement + Head + Complement

We will deal with these possibilities in sequence.

More complex NPs: single-word premodifier + head

Table 4 illustrates NPs whose heads (bolded) are modified by single-word premodifiers (italicized). The part of speech of the premodifiers is given in the left-hand column.

FORM OF PREMODIFIER	EXAMPLE
Article	*The* **wombats** escaped.
Adjective Phrase	*Strong* **winds**.
Demonstrative pronoun	*That* **vase** is valuable.
Genitive NP	*Sheila's* **serve** is powerful.
Genitive pronoun	*Her* **serve** is powerful.
Noun	*Metal* **plates** shielded the instruments.
Indefinite pronoun/quantifier	*Some* **survivors** remained.
Wh-word	*Which* **lobster** do you want?
Numeral	*Seven* **boxes** fell.
Ordinal	*Second* **thoughts** assailed us.
Quantifier	*Several* **vats** of beer.
Negative	*No* **accidents** were reported.

TABLE 4: SINGLE-WORD PREMODIFIERS

Exercise

In each sentence below, identify all the NPs; then identify the part of speech of the head and of any premodifier(s) in each NP:

a. The evidence was unconvincing.
b. Party invitations are always welcome.
c. Many people have visited that exhibition.
d. Their intuitions make them remarkable therapists.
e. Dust mites cause serious allergies in some people.

The range of premodifiers of noun heads is large, including nearly all the parts of speech. The items in Table 4 present the basic possibilities. The most frequently used modifiers are the articles, which we briefly discussed in our chapter on Minor Parts of Speech. Here we will elaborate on that discussion.

We noted that one major use of an article is to indicate whether the NP in which it occurs is definite or not: if the NP is definite, then the speaker/writer assumes that the hearer/reader can identify the referent of the NP; and if the NP is indefinite, then the speaker/writer assumes that the hearer/reader

cannot identify its referent.

Yet another meaning associated with NPs is that of **referentiality**. A **referring NP** may be either definite or indefinite but it denotes a particular entity or set of entities: the bold NP in ***The/A man*** *sat down* refers to some particular man.

The opposite of a referring NP is an **attributive** or **non-referring** one. An attributive NP provides a description but does not refer to any particular individual(s). Anyone or anything that fits the description will do. Attributive NPs can often be paraphrased by *whoever . . .*, *whatever . . .*, or *any . . .*, as in ***The man who /Whoever steals my purse*** *steals nothing*.

(27) a. I saw **the** elephants at **the** zoo. (referential and definite)
b. **The** next caller will win a vacation to Miami. (attributive and definite = whoever is the next caller)
c. I want **an** elephant. Its name is Big Bob. (referential and indefinite)
d. I want **an** elephant. Any pink one will be fine. (attributive and indefinite.)

Finally, NPs can have a **generic** or **non-generic** reference. **Generic** reference designates an entire class (i.e., category, set) of entities. A non-generic reference designates a particular member or members of a class.

(28) a. Cats are skilled predators. (generic, indefinite)
b. A cat is a skilled predator. (generic, indefinite)
c. A cat is asleep on the table. (non-generic and indefinite)
d. The cat is asleep. (non-generic and definite)
e. The cat is a skilled predator. (ambiguous: generic or non-generic and definite)

Exercise

Identify each italicized expression as (a) definite or indefinite, (b) referential or attributive, and (c) generic or non-generic. You will have to imagine a situation in which each sentence is used. Note where ambiguities arise.

a. I need *a sandwich*.
b. I need *a part for my car*.
c. Alice wants to protect *the elephant*.
d. *The president's detractors* must be insane.

The only somewhat difficult case in Table 4 is the **noun modifier**, that is, the case where a noun modifies a head noun, as in *metal plates*. Remember that *metal* is not an adjective for formal reasons—e.g., it cannot be compared or intensified: **metaler*, **more metal*, **very metal*. Noun modifiers appear frequently when one speaks of a material out of which something is made, but the semantic range of such constructions is extensive:

(29) a. government spying
b. state law
c. pie chart
d. desert safari
e. Sunday newspaper
f. stone wall
g. plastic cups
h. cardboard boxes

Exercise

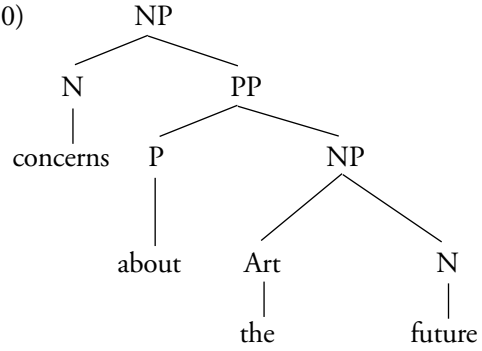
1. Try to describe the semantic/meaning relations between the head noun and its noun modifier in each of the constructions in (29).

2. What do writing handbooks say about the use of noun modifiers? Examine a piece of real-life prose, identifying various types of premodifiers. Can you determine different writing styles according to their variety?

More complex NPs: head + prepositional phrase

Most of the simple premodifiers above contain one word. The least complex postmodifier—and by far the most common—is the prepositional phrase (PP). Remember that PPs consist of a preposition and a noun phrase. So this simple postmodification will have the structure: N + PP. (31a-f) are examples, each with the structure:

(30)



(31) a. songs about rebellion
b. clocks on the wall
c. walks with my mother
d. arguments about abortion
e. reasons for my hesitation
f. sources of concern

Exercise

Provide a fully labeled tree diagram for each of the NPs in (31a-f).

A problem that arises with expressions in which a N is followed by a PP is whether the N and PP actually combine to form a noun phrase, as in the examples in (31), or whether they are simply a non-unified sequence of N followed by PP, as in *Put the book on the shelf*. In this expression, the N *book* is not combined with the PP *on the shelf* into an NP. It is important to have ways of identifying which kind of expression we are dealing with.

Remember that we said that one test for phrasehood is the possibility of being replaced by a single word. In the case of NPs these words would be pronouns. So, if a sequence of words can be replaced by a pronoun, then it is very likely an NP. For instance, you could replace all of the expressions in (31) by some form of the word *they*. Let's call this test the **Pronoun-Substitution (Pro-Sub) Test**. To see how it works, let's consider (32):

(32) a. Woody admired the picture on the wall.
b. Woody put the picture on the wall.

Applying the Pro-Sub Test to *the picture on the wall* in (32a) we get (33a):

(33) a. Woody admired it.

This is grammatical, so in **(32a)** *the picture on the wall* is a unified NP.

When we apply the Pro-Sub Test to the same sequence of words in (32b) we get (33b):

(33) b.*Woody put it.

This is ungrammatical, showing us that *the picture on the wall* in **(32b)** is not a unified NP.

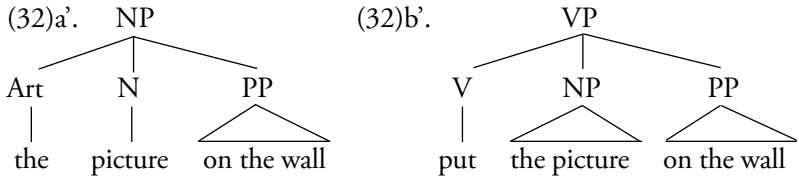
If we now apply the Pro-Sub Test to *the picture* in (32b) we get:

(34) Woody put it on the wall.

This is grammatical, showing us that *the picture* in **(32b)** is separate from *on the wall*.

These patterns of grammaticality lead to the conclusion that (32a) contains an NP made up of a head with a PP postmodifier and that (32b) contains the simpler NP *the picture* followed by a separate PP *on the wall.*

We can represent these by the following tree structure diagrams:



Exercise

1. English contains several different types of pronouns—demonstratives, wh-pronouns, and the like—and pronoun substitution tests can be created using any of them. Using wh-pronouns we can create the **wh-question Test**. In this version of the Pro-Sub Test, you replace the sequence under analysis with an appropriate question word and turn the sentence into a question. Let's apply this test to (32a,b) just as we applied the original Pro-Sub Test. First replace *the picture on the wall* in (32a) with an appropriate wh-word and turn the result into a question. If the result is grammatical then the sequence is a unified NP. If the result is not grammatical

then you have evidence that the sequence is not a unified NP. Now apply the same test to the sequence in (32b). Follow the same procedure and logic. You should find again that in (32a) *the picture on the wall* is an NP, but that in (32b) *the picture on the wall* is not.

2. You will recall also that movement is a good test for phrasehood. The active-passive relationship you read about in our chapter on Minor Parts of Speech provides the basis for a movement test that can identify NPs. Recall from that discussion that the passive subject NP corresponds to the active object NP and the active subject NP corresponds to the NP that is the object of passive *by*. These correspondences are indicated by subscripts in:

Active: [$_1$ Masked raiders] breached [$_2$ the security system].
Passive: [$_2$ The security system] was breached by [$_1$ masked raiders].

Given that subjects are generally NPs, if an expression can be turned into a passive subject then it is an NP. We can apply this test to (32a,b):

(32) a. Woody admired the picture on the wall.
c. The picture on the wall was admired by Woody.

Because (32c) is grammatical the sequence *the picture on the wall* must be an NP in (**32a**).

(32) b. Woody put the picture on the wall.
d. *The picture on the wall was put by Woody.

Because (32d) is ungrammatical, the sequence *the picture on the wall* cannot be an NP in (**32b**).

Use the passive test to show that the italicized phrases in the following sentences are NPs:

a. Grammatical tests prove *grammatical categorizations*.
b. Teenagers mow *lawns*.
c. Obsessive-compulsives write *grammar books*.
d. The military developed *the internet*.
e. The teachers forced *the unfortunate students* to read grammar books.

There is also a paraphrase test for a noun head + PP. If you can insert the words *which is/was* or *that is/was* between the noun head and the PP, the construction is probably of the head + postmodifier type. We call this the **Whiz-test**. (*Wh* comes from *which*; *iz* comes from the pronunciation of *is*). Applying this test to (32a) and (32b) we end up with the paraphrases (32e,f), respectively.

(32) e. Woody admired the picture which was on the wall.
f. *Woody put the picture which was on the wall.

That (32e) is grammatical indicates that *on the wall* is a postmodifier of *picture* in (**32a**) and thus that *the picture on the wall* is a phrase in that sentence; the ungrammaticality of (32f) indicates that *on the wall* is not a postmodifier of *picture* in (**32b**) and thus that *the picture on the wall* is not a phrase in that sentence.

Thus we can conclude that *the picture on the wall* in (**32a**) is a unified NP containing a head noun and a following PP. In contrast, in (**32b**), *the picture on the wall* is not a unified NP.

Our tests demonstrate aspects of the process of **grammatical reasoning**—the use of tests, the need for several tests, consideration of multiple hypotheses, and the role of grammaticality judgments. A further dividend is that the tests we have just described will apply to just about any type of NP, not just those involving PP postmodifiers.

More complex NPs: multiple premodifiers

Our examples so far have dealt only with single word premodifiers, but premodifiers can be multiplied, as (35) shows.

(35) a. *the two* culprits (article + numeral)
b. *those metal* plates (demonstrative + noun)
c. *several other* candidates (quantifier + indefinite)
d. *one such* oddity (numeral + indefinite)
e. *a second* chance (article + ordinal)

Exercise

Identify the premodifiers and their types in:

a. several handsome geldings
b. long boring sessions
c. three French hens

d. a rock quarry
e. many such steamy scenes

More complex NPs: phrasal premodifiers

Multiple one-word premodifiers cause little trouble for students. But phrasal prenominal modifiers are more complicated. Table 5 presents some major types. (We deal with verbal phrases in our chapter on Multi-Clause Sentences.)

FORM OF PREMODIFIER	EXAMPLE
Genitive NP (GenNP)	*This friend's* hobby is knitting.
Adjective phrase (AP)	*Very old* memories return easily.
Verbal phrase (VblP)	*Carelessly organized* meetings annoy everyone.

TABLE 5: PHRASAL PREMODIFIERS

Phrasal premodifiers can be expanded, adding greater complexity to the structure. Moreover, genitive NPs and APs readily combine with other structures to create heavily premodified NPs:

(36) a. *My friend's* hobby is interesting.
(GenNP *my friend's* modifies *hobby*; genitive pronoun (GenNP) *my* modifies *friend*.)
b. *All my friend's* hobbies are interesting.
(GenNP *my friend's* modifies *hobbies*; *my* modifies *friend*; *all* modifies *my friend's hobbies*)
c. *All my friends' very old* plates (three premodifiers: quantifier *all*; Gen NP with genitive premodifier *my friends'*; AP with intensifier *very old*)
d. *Those very old counterfeiting* plates belonged to Capone.
(three premodifiers: demonstrative *those*; AP with intensifier *very old*; verbal phrase *counterfeiting*)

Exercise

Describe the meaning difference between (36b) and *All my friends' hobbies are interesting*. Note the positions of the apostrophes.

Genitive NPs raise two further issues of complexity. First, they are closely related to postmodifiers that use a prepositional phrase headed by *of*. Compare the following.

(37) a. my friend's hobbies
b. the hobbies of my friend
c. my friend's house
d. the house of my friend
e. the house of the friend that I met in Palo Alto
f. the birth of a daughter
g. a daughter's birth
h. my daughter's birth
i. the home of the brave
j. ?the braves' home [Note: (37i) and (37j) have different meanings.]
k. a cup of soup/coffee/tea
l. *a soup's/coffee's/tea's cup
m. a wedge of cheese
n. *a cheese's wedge
o. a pat of butter
p. *a butter's pat
q. a ream of paper
r. *a paper's ream
s. a fistful of dollars
t. *a dollar's fistful

These examples indicate that the choice of premodifier genitive vs. *of*-genitive depends on various factors:

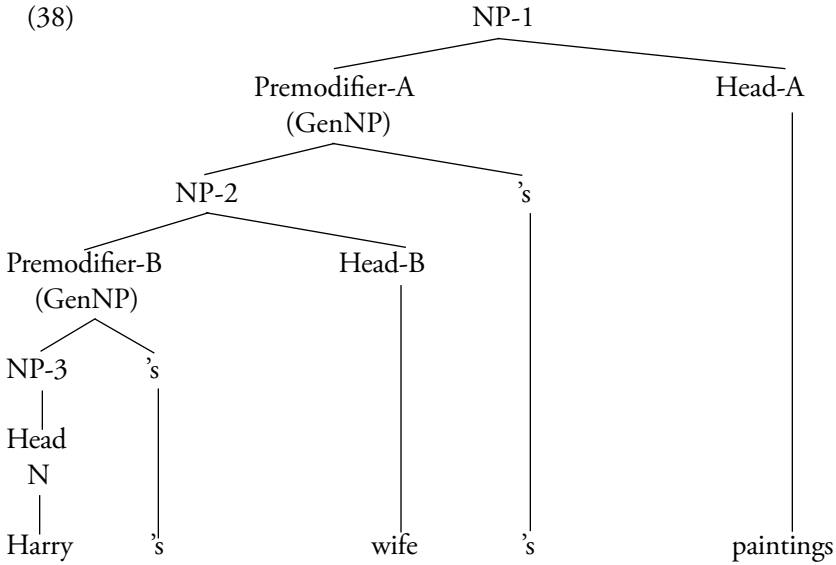
a. The length of the GenNP: the longer the GenNP, the more likely we are to use an *of*-genitive, e.g., (37e).
b. Whether the entity represented by the genitive is animate or not; if it is, we are more likely to use the premodifier genitive; cf. *the cat's fur* vs. ?*the wheel's rim*).
c. If the GenNP is a pronoun, we strongly prefer the premodifier genitive; cf. *her car* vs. **the car of her*, *Sophie's Choice* vs. ?*A Choice of Sophie('s)*.
d. Note the meaning difference between *her photographs* and *photographs of her*. The first can have many meanings, e.g., photographs she owns/took/ordered/designed/etc. The second means photographs in which she is pictured.
e. An NP containing a premodifier genitive is definite, but a post-

modifier genitive allows indefinite determiners to modify the head noun; compare the definite NP *Oscar's friend* with the indefinite NP *a friend of Oscar's*.

While native speakers are not likely to have trouble with such complexities, non-native students may encounter serious difficulties with this construction.

The second complexity is that genitive NPs themselves contain a NP. When one structure contains another structure, we say that the second structure is **embedded** in the first. The NP *Harry's wife's paintings* contains a genitive NP within a genitive NP. In other words, *Harry's* is embedded within *Harry's wife's*, which in turn is embedded in *Harry's wife's paintings*. This structure is represented in (38):

(38)



Embedding allows one function (or form) to contain other functions (or forms). An understanding of embedding is critical to analysis of grammatical structures with any significant degree of complexity. Let's illustrate this fact with diagram (38). NP-l (*Harry's wife's paintings*) consists of a premodifier of the form GenNP (*Harry's wife's*) and a head noun (*paintings*). The GenNP in turn consists of a full NP (NP-2), along with the genitive inflection *'s*. In other words, the form NP-2 is contained in the form NP-l. NP-2 contains a premodifier (*Harry's*) and a head noun (*wife*). Finally, premodifier-B contains a single noun head (*Harry*), the *'s*, and no premodifiers.

Under NP-3, we could have chosen a premodifier with a possessive pronoun and a noun modifier to give us *my uncle Harry's wife's paintings*. We could even have selected another GenNP under NP-3, in which case we might have gotten *Harry's cousin's wife's paintings*. In fact, we could (in principle) go on to infinity, producing ever longer and more genealogically bizarre structures: *Harry's aunt's cousin's son's granddaughter's niece's sister's step-child's friend's paintings*.

Embedding enables language to be infinite in the number and length of the sentences it can create. Fortunately, speakers tend to use these possibilities sparingly, though occasionally writers such as Dylan Thomas, Henry James, and William Faulkner toy with them. As you progress through this book, you will see the pervasiveness of embedding.

Before we leave premodifiers of Ns we must address one final matter, namely the order of premodifiers. There are many proposals in the grammatical and linguistic literature, many of remarkable complexity. The following, adapted from Frawley (1992: 482-3) is a partial list:

Det	> quantity	> value	> physical property	> age	> color	> Head
The	five	good	long	old	brown	tables

Other languages allow different orders, so your non-native English speaking students may come up with utterances that violate the order rules, such as the following from a Korean student:

the weakness of the each student

Exercise

Identify and draw brackets around each NP and underline its headword. Using Tables 3 and 4, identify the type of each premodifier in the NP.

a. We noticed several suspicious details.
b. My best friend's parents gave his younger sister a European tour as a graduation present.
c. Three false alarms were mysteriously called in during exam week.

Complex NPs: The range of postmodifiers

As complicated as possessives are, we easily recognize the infrequency of expressions such as *Harry's uncle's cousin's sister's paintings*. Much more common—and much more complex—are the various sorts of phrases and

clauses that follow head nouns. We have already examined the prepositional phrase, probably the simplest postmodifier. Yet even this innocent construction raises the specter of mind-boggling expansions. Like possessive NPs, prepositional phrases contain noun phrases, which can contain prepositional phrases, which can contain other NPs which can contain a PP . . . all the way to the linguistic loony bin. In case you have doubts, consider the NP in (39):

(39) The book in the drawer of the desk in the office of the leader of the rebellion against the oppression of readers of tales of adventures on far planets of the galaxy . . .

Complexity is due also to the potential for various sorts of postmodifiers, each more structurally intricate than the premodifiers. We treat these structures more fully in other chapters. For the present, we will introduce the major types of postmodifiers and comment briefly on them.

POSTMODIFIER TYPE	EXAMPLE
Adjective phrase (AP)	[Anyone *fond of kumquats*] should buy this cookbook.
Appositive NP (AppNP)	[His nominee, *an infamous scoundrel*,] is unlikely to be elected.
Relative clause (RC)	[The contestant *who guesses the title*] will win a trip to Tahiti.
Appositive relative (AppRC)	[G.W. Bush, *who is the 43rd President of the US*,] is only 60.
Verbal phrase (VblP)	[The contestant *guessing the title*] will win a vacation in Tahiti. [The person *seated at the president's right*] is her bodyguard. [The player *to watch*] is Tzrdsky.

TABLE 6: COMPLEX POSTMODIFIERS

We have seen **adjective phrases** (APs) that function as premodifiers. Such constructions tend to be brief—one or two words if the adjective is not coordinated. However, some adjectives can, like nouns, appear with their own postmodifiers. (In the example in Table 6, *of kumquats* is a PP that complements *fond*; since that PP contains an NP, expansions like that in (39) are possible.) APs with complements or postmodifiers almost always occur in the

postmodifier position of noun phrases. Postmodifying APs also tend to allow the Whiz-test: *Anyone **who is** fond of kumquats*.

If the head of the NP is an indefinite pronoun such as *someone*, *something*, *anything*, *nothing*, then any attributive AP will occur after it:

(40) a. I heard something *strange*.
b. I haven't heard anything *new*.
c. I see nothing *unusual*.

Appositive noun phrases (AppNPs) and **Appositive Relative Clauses** (AppRCs) occur as "parenthetical asides" after their head noun. They are usually blocked off in writing by surrounding commas (dashes are also possible). In speech, they are surrounded by perceptible pause and often a fall in voice pitch, akin to the aside spoken by a stage actor. The appositive NP has the same referent as the rest of the NP. Thus in Table 6 *his nominee* and *an infamous scoundrel* designate the same individual. Since appositives can be expanded just like any other NP, they allow for infinite embedding. Sentence (41) suggests the possibilities.

(41) His nominee, *an infamous scoundrel with principles learned from years of service in one of the most corrupt political machines ever devised by the devious minds that have blemished history*, is unlikely to be elected.

Appositives provide extra information that is generally viewed as not being required for the identification of the referent of the NP. Some handbooks say that they can be omitted without changing the meaning of the sentence they occur in. This is quite misleading. The meaning of the sentence certainly changes, though what the affected NP refers to may not.

Verbal phrases (VblPs), which will be dealt with further in our chapter on Multi-clause Sentences, are like adjective phrases: short VblPs precede noun heads; longer VblPs, which may possess their own range of objects, complements, and modifiers, follow the head noun within a noun phrase. In general, short modifiers tend to precede head nouns and longer ones tend to follow them.

Relative clauses were introduced in our chapter on Minor Parts of Speech and will be more fully discussed in our chapter on Modifications of Basic Clause Patterns. These clauses usually begin with a wh-word, *that*, or no introducer at all: *The soldier **who** died . . . , The thing **that** gets me . . . , The book [ ] you wrote . . .*

Exercise

Draw brackets around each NP and underline its headword. Using Tables 4, 5, and 6, indicate the type of each premodifier and/or postmodifier that you find.

a. Don't go out in the midday sun.
b. The cat near the window is Salome.
c. Alvin set the goldfish bowl near the window.
d. I saw the cat near the window. (ambiguous: analyze two different ways)
e. The squirrel that Bonzo, my pet chimp, chased became quite flustered.
f. Some friends of Boris gave him a box filled with his favorite candy as a going-away present.
g. The witnesses at the scene noticed a stranger who drove away in a red station wagon full of flowers.

Complements in NPs

Complements in NPs typically follow the head N, though some may occur before it, giving us the formula:

(42) (Complement) + H + (Complement)

The complements before the head may be either nouns or, more rarely, adjectives:

(43) a. a fiction writer cf. someone who writes fiction.
b. an economics professor cf. someone who professes economics.
c. a technical writer cf. someone who writes technical manuals/ materials.
d. a financial adviser cf. someone who advises on financial matters.
e. an ecological expert. (Huddleston and Pullum 2002: 439)

When the complement follows the head N it must be either a PP or a clause:

(44) a. the trip *to Disneyland* (PP)
b. the claim *that the war is justified* (*that*-clause)
c. the question *whether we've won* (embedded/indirect question)
d. the question *'Are we there yet?'* (quoted question)

e. the request *to withdraw* (*to*-infinitival clause)

Noun complement clauses are also discussed in our chapter on Multiclause Sentences.

Nominalization

In our chapter on Morphology and Word Formation, we describe how a word belonging to one part of speech may be derived from a word belonging to a different part of speech. **Nominalizations** are nouns derived from words belonging to other parts of speech. Here we focus only on nouns derived from verbs. These derived nouns can head noun phrases, just like any other noun. However, their relationship to verbs allows them to have subjects and objects. For example, *amusement* is derived from *amuse*, which is a transitive verb and so grammatical in a sentence with both a subject and a direct object, such as (45):

(45) a. The clown amused the children.

We can nominalize (45a) as the NP (45b):

(45) b. The clown's amusement of the children.

Notice that in the nominalization, the subject of the clause in (45a) shows up as a genitive premodifier, *The clown's*, and that the direct object of the verb in (45a), *the children*, shows up as the object of the preposition *of*.

Exercise

1. Nominalize the following sentences.
   a. Werner inspected the package.
   b. Pamela enjoys bobsledding.
   c. The truth gradually emerged.

2. Change the following noun phrases to sentences by reversing the nominalization.
   a. Manuel's toleration of teasing
   b. Oscar's avoidance of hard work
   c. Helen's expectation that she would be rescued

3. Nominalization occurs more frequently in written texts, and especially technical and academic texts, than in speech. Pick a paragraph

in a scientific text and a similar sized section of dialog in a novel and compare the number of nominalizations in the two.

Complex NPs: Coordination

Perhaps on the principle that too much of a good thing is impossible, languages allow us to repeat NPs indefinitely. Coordinated NPs are joined by a coordinating conjunction, such as *and* or *or*, as in (46):

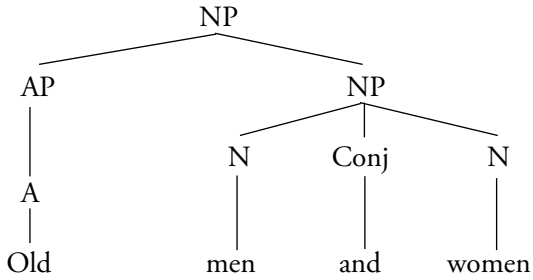
(46) *My sister* and/or *her best friend* will deliver the letter.

Such structures are relatively simple to deal with—except for one problem. Consider the ambiguous sentence (47):

(47) Old men and women will be served first.

Who will be served first? Old men and all women? Old men and old women? The answer seems to depend on whether the premodifying adjective *old* applies to *men* only or to the conjunction of *men and women*. To differentiate these possibilities, we must allow not only full NPs to coordinate but also heads of NPs. We represent the ambiguity diagrammatically in (48).

(48)a.



(48)b.

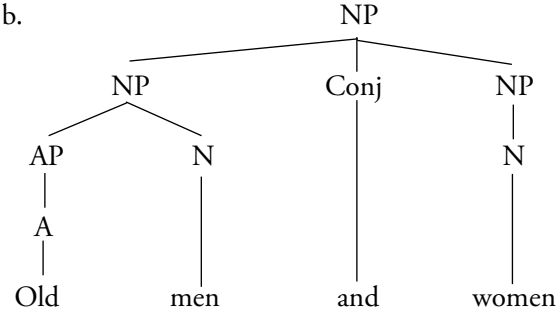


Diagram (48a) represents the situation in which *old* modifies the NP *men and women*; (48b) represents the situation in which *old* modifies only *men*.

THE VERB PHRASE (VP)

We begin with the functional formula for VPs and then examine the forms that can satisfy those functions.

(49) VP Functional Formula

(AUXILIARY*) + HEAD + (OBJECT*) + (COMPLEMENT*) + (MODIFIER*)

This formula states that a VP must contain a head word, optionally preceded by one or more auxiliaries, and optionally followed by object(s), complements, and/or modifier(s).

Simple VPs: head alone

Single-word VPs always consist of a head word that is an intransitive verb, bolded in the examples in (50). The syntactic structure of such intransitive verb phrases is given in (50'):

(50) a. Hector **walks**.
b. All the employees **agree**.
c. The lemmings **followed**.
d. Cynthia **lied/laughed/coughed/died/** . . .

(50') VP
|
V

In school grammars, the terms **main verb** and **simple predicate** sometimes are used for the head word of the VP.

VPs: auxiliaries and head

In our chapter on Major Parts of Speech, we distinguished between main verbs and auxiliary verbs. The discussion primarily concerned head verbs. However, heads often occur in the company of other verbs, called **helping verbs**, **auxiliaries**, or simply **Aux**, some of whose functions we described in our chapter on the Minor Parts of Speech.

The major auxiliary verbs in English are *have*, *be*, and *do*. (In our chapter on Minor Parts of Speech we briefly discussed the **modal auxiliaries** *will*, *would*, *can*, *could*, *shall*, *should*, *may*, *might*, and *must*.) The uses of *have*, *be*, and *do* are illustrated in (51):

(51) a. The zombies *departed* from Hector's house. (head alone)
b. Hector *is acting* strangely. (*be* + head verb in Ving form)
c. Hector *has* never *looked* at me like that. (*have* + head verb in past participle form)
d. Hector *does* not *eat* vegetables. (*do* + head verb in infinitive form)
e. Hector *has been consorting* with the zombies. (*have* + *be* in past participle form + head verb in Ving form)

As these examples show, a verb phrase will generally contain one head verb; in English, auxiliaries always precede the main verb. The auxiliaries may be separated from the verb, either through interruption by items like *never* as in (51c) or by inversion as in ***Has*** *Hector* ***seen*** *Oswald*? Let's examine these auxiliaries in more detail.

Have is the auxiliary associated with the perfect aspect. It can accept all of the four potential inflections of a main verb, although its third person singular present tense and past tense forms are slightly irregular:

(52) a. **have** sung
b. **has** sung
c. **had** sung
d. **having** sung

These examples also demonstrate that auxiliary *have* is followed by a verb (whether another auxiliary or a main verb) in the past participle form, which we have abbreviated Ven. So our formula for auxiliary *have* is HAVE + Ven. The syntactic structure that corresponds to this formula is:

(53)

A word of caution: *have* may also serve as a head verb. If a single instance of *have* is the only verb in a clause, then it is a main verb and therefore head of its VP: *I* ***have*** *a cold*. If two instances of *have* occur, the first is an auxiliary, as in *I* ***have*** *had a cold for two weeks*, and the second is the head verb.

Exercise

Using (a) as a model, identify the two elements of the perfect in each

of the following examples:

a. We *have* eat*en* all the pizza.
b. They have been in there for hours.
c. Bill has seen the light.
d. The fugitive has taken the bus.
e. The police have blocked the roads.
f. They haven't found her yet.

Be is the auxiliary associated with the progressive aspect, which is compatible with almost all the possible forms of *be*:

(54) a. **be** singing
b. **am** singing
c. **is** singing
d. **are** singing
e. **was** singing
f. **were** singing
g. **been** singing
h.*__being__ singing

Be, *have*, and *do* are the most irregular verbs in English. Their standard English forms are listed below in Tables 7.

a. BE		Present		Past	
		Singular	Plural	Singular	Plural
Person	1	am	are	was	were
	2	are	are	were	were
	3	is	are	was	were

Past participle (Ven form)	been
Present participle (Ving form)	being
Gerund (Ving form)	being

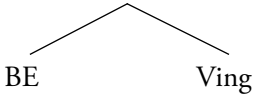
b. HAVE	Present	
	Third person singular	has
	All other persons and numbers	have
	Past	
	All persons and numbers	had

	Past participle (Ven form)	had
	Present participle (Ving form)	having
	Gerund (Ving form)	having
c. DO	Present	
	Third person singular	does
	All other persons and numbers	do
	Past	
	All persons and numbers	did
	Past participle (Ven form)	done
	Present participle (Ving form)	doing
	Gerund (Ving form)	doing

TABLE 7: FORMS OF *BE*, *HAVE*, AND *DO*

Auxiliary *be* will always follow auxiliary *have* when they occur together in the same clause. Whichever verb follows progressive *be* assumes its present participle form, Ving. Our formula is BE + Ving, and the syntactic structure corresponding to this is:

(55)



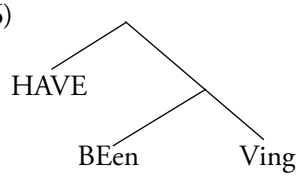
Exercise

Using (a) as a model, identify the two elements of the progressive in each of the following sentences:

a. The students *were* act*ing* out.
b. Everyone was talking during class.
c. Ted and Sheila are getting divorced.
d. Sheila and Roger are planning to elope.
e. Ted is feeling blue.
f. Their friends are acting surprised.

When perfective *have* and progressive *be* occur together in a clause, (1) *have* precedes *be*; (2) *be*, as the verb immediately to the right of *have*, occurs as a *been*; and (3) the verb immediately to the right of progressive *be* occurs as Ving. The associated syntactic structure is:

(56)



Exercise

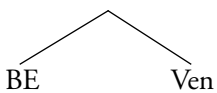
Using (a) as a model, identify and distinguish the elements of the perfect and the progressive in each of the following sentences:

a. I **have** <u>be</u>**en** search<u>ing</u> for that for ages. (Bold = perfect; underlined = progressive)
b. We had all been hoping for better weather.
c. Eleanor has been dating JD for several months now.
d. JD has been seeing a physical therapist for his damaged knee.
e. The plants have been doing better since you started talking to them.
f. My computer has been crashing a lot lately.

Like *have*, *be* may serve as a main verb. When it does, as in *Wiggles **is** a friendly boa*, it is a **linking** verb. When two instances of *be* occur, the same generalization holds as for *have*—the first is an auxiliary (as in *Wiggles **is** being affectionate*) and the second is the head verb.

The auxiliary *be* is a bit more complex than auxiliary *have* because it also occurs in the passive. The functional formula for the passive is Be + Ven, and the corresponding syntactic structure is:

(57)



Exercise

Using (a) as a model, identify the two elements of the passive in each of the following sentences:

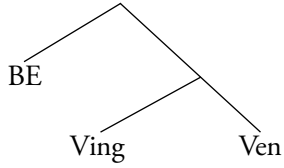
a. This book *was* writt*en* by a nice derangement of linguists.
b. The current global warming was predicted by scientists almost fifty years ago.
c. The Mona Lisa was painted by Leonardo da Vinci.
d. Global warming is caused by excessive hydrocarbon use.
e. Passive sentences are marked by a form of *be* and a verb in its past participle form.
f. Movies are intended to communicate ideologies.

Can the passive *be* occur with the progressive *be*? Sentence (58) shows that it can:

(58) That song is being sung poorly.

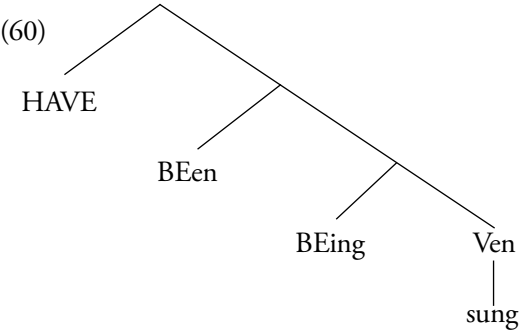
(58) also shows that the passive *be* follows the progressive *be*. We can represent the structure of the verb phrase in (58) as:

(59)



Finally, we can combine all of the auxiliaries above into a single verb phrase. Can you think of what such a verb phrase might be? Let's look at it structurally:

(60)



To imagine such an ungainly (but grammatical) verb phrase in a sentence, consider (61), which denotes either the singing of one extremely long song or repetitious performances of the same song.

(61) That song has been being sung for hours, and I'm sick of it.

Exercise

Using (a) as a model, identify and distinguish the elements of the perfect, the progressive, and the passive in each of the following sentences:

a. Actors **have** *be***en** be*ing* nominated for Oscars for over fifty years now. (Bold = perfect; italics = progressive; underlined = passive)
b. Time and energy have been being wasted on that project for a long time.
c. The children must not have been being well cared for.
d. The parents should have been being monitored all along.
e. Administration policy hasn't been being properly scrutinized by Congress.
f. Air travelers from the Middle East have been being harassed by security officers since 9/11.

A note on Do

Do, the last auxiliary, is something of an exception, as the sentences below suggest:

(62) a. Jason does not/doesn't sing.
b. Does Jason sing?
c. Jason DOES sing.
d.*Jason may do sing.
e.*Jason do may sing.
f. *Jason is doing sing.
g. *Jason does be singing. (grammatical in some dialects of English)
h.*Jason has done sing.
i. *Jason does have sing.
j. *Jason is done sing.
k.*Jason does be sung.

What can we learn from this odd pattern of sentences? First, when *do* occurs

with a main verb, that verb is in its base (V) form, represented by the formula DO + V. Second, *do* cannot occur with any of the other auxiliaries, either before or after them. Third, *do* may occur when the main verb is negated by *not* or *n't* (62a), in a question (62b), or in an emphatic sentence (62c).

Fourth, the auxiliary *do* differs from the **Pro-Verb Phrase** *do*. Consider sentence (63).

(63) Did[1] she do[2] so too?

In this example, *Did*[1] is an auxiliary, while *do*[2] *so* acts as a Pro-Verb Phrase, an expression that substitutes for a verb phrase.

Auxiliary *do* and main verb *do* also differ, as the fact that they can co-occur shows: [$_{\text{Aux}}$*Did*] *you* [$_{\text{MV}}$ *do*] *the dishes?*

One handy test for identifying VPs is the **Do-So Test**. One simple application of this test is to substitute *do so* for the VP (ensuring that the tense of *do* matches that of the original VP):

(64) a. The zombies *did so*. (= 51a)
b. Hector is *doing so*. (= 51b)
c. Hector has never *done so*. (= 51c)
d. Hector does not *do so*. (= 51d)
e. Hector has been *doing so*. (= 51e)

In another version of this test, the sentence in question is coordinated with one similar to it; in this case the elements reverse to form *so do*:

(65) a. Hector juggles and *so does* Zenobia.
b. All the employees agree and *so does* their supervisor.
c. The lemmings jumped and *so did* the zoologists.

In short, the expressions *do so* and *so do* replace a VP, including its objects, complements, and modifiers, but excluding negation and auxiliaries.

Exercise

In the sentences below, draw brackets around the main verb. Draw formulas or trees similar to those used in the preceding section to describe the structure of the auxiliaries + main verb.

a. I have bought all my textbooks for next semester.
b. I have a few dollars for fun.

c. Sylvia has been doing a lot of work lately.
d. Of course we are being ironic.
e. Zelda was congratulated for her good work.
f. The job has been completed.

VP: head + object(s)/complement

A phrase that obligatorily follows a verb head is called an **object** or **complement**. These terms are sometimes interchangeable, although tradition has tended to attach "object" to some constructions and "complement" to others. The reasons for the variation are obscure. The label "object" dimly suggests the goal or purpose of the verb head, though neither of these semantic labels applies to every structure so labeled. The term "complement" suggests the notion of completing (hence the spelling) the verb in some way. Table 8 lists the four main types of objects and complements.

TYPE	EXAMPLE
Direct Object	The Vikings demanded [*tribute* (NP)].
Indirect Object	Waldo gave [*his sister* (NP)] a dictionary.
PP Complement	Waldo gave a dictionary [*to his sister* (PP)]
Subject Complement	Freud was [*a prude* (NP)]/[*prudish* (AP)].
Object Complement	I consider Jung [*a quack* (NP)]/[*unreliable* (AP)].
Sentence Complement	I realize [*that tests should be easier* (S)].

TABLE 8: OBJECTS AND COMPLEMENTS OF VERBS

Table 8 reveals that NPs can serve any object or complement function, that adjective phrases can also act in complement functions, and that an entire clause or sentence can act as the complement of certain verbs.

An important grammatical notion associated with the direct object is that of **transitivity**. A **transitive verb** takes a direct object; an **intransitive verb** does not. Thus the sentences (66a-d) contain transitive verbs and those in (67a-d) contain intransitive verbs. The direct objects in (66) are italicized.

(66) a. Moriarty eluded *Sherlock*.
b. Everyone avoided *me*.
c. Sarah gave him *some good advice*.
d. I consider *Jung* a quack/unreliable.

(67) a. We walked.

b. Smoke rises.
c. Harrison confessed.
d. Everyone in the room laughed.

In English, a large number of verbs can be either transitive or intransitive, sometimes with a considerable difference of meaning:

(68) a. The fire smoked.
b. Shelley smoked. (Ambiguous)
c. Shelley smoked the salmon.

Thus whether such verbs are transitive or intransitive can only be determined by their use in an actual clause. One simple test is that an intransitive verb can potentially end a complete clause, as in (67).

Two structures require not one but two phrases to follow the verb. The indirect object construction, e.g., (66c), typically calls for a direct object also. Verbs that enter into such constructions are said to be **bitransitive** or **ditransitive**. The object complement construction (e.g., (66d)) requires a direct object preceding the complement. We deal in more detail with these constructions in our chapter on Basic Clause Patterns.

Verbs with objects may imply end products and/or bounded activities:

(69) a. He built a workbench.
b. He builds workbenches.

(69a) implies that a workbench came into being as a result of the building; it also views the workbench building event as having an end point, namely the completion of the workbench. (69b) is in the simple present tense and represents multiple, discrete, workbench building events, as the plural, *workbenches*, makes clear. In this respect, it is like a punctual verb, such as *cough*, *punch*, or *kick*.

Verbs without objects often imply no natural end-point. Compare (70a) with (70b):

(70) a. She ran.
b. She ran a marathon.

(70a) implies no particular end to the running; in fact, it is compatible with *and she's still running*. (70b), on the other hand, looks at the marathon-running as a single event with a natural completion, namely, the end of the marathon.

The simple present version of (70b), *She runs marathons*, implies multiple individual marathon-running events. Note the plural, *marathons*.

Verbs allow or select complements of various syntactic forms. For instance, when *wait* is transitive, its complement may be either an NP (e.g., *Wait your turn!*) or a PP (e.g., *We'll wait for the next bus*). Anyone learning the language must learn the restrictions and possibilities associated with verbs.

Exercise

Using (a) as a guide, identify and distinguish the various objects and complements in the following sentences. Be sure to identify the entire object/complement expression in each instance.

a. The people elected Oscar (Direct Object) poet laureate (Object Complement).
b. She must be really intelligent.
c. Her daughter became a famous scientist.
d. Fred smokes cigarillos.
e. The students gave the new teacher a welcome gift.
f. The class named Rodriguez "classmate most likely to succeed."
g. Many people believe that James Joyce was the greatest novelist of the 20th century.

VP: head + modifier(s)

To distinguish them from modifiers of nouns, modifiers of verbs often have special names such as **adverbial**. The most frequent modifiers come in only four formal types, as indicated in Table 9.

TYPE OF MODIFIER	EXAMPLE
Adverb phrase	We left *early*.
Prepositional phrase	We stayed *in Helsinki*.
Adverbial clause	We left *after it started to snow*.
Noun phrase	We enjoyed it *a great deal*.

TABLE 9: MODIFIERS OF VERBS

Adverbial clauses begin with the subordinating adverbial conjunctions mentioned in the chapter on Minor Parts of Speech.

Like single adverbs, the phrasal and clausal modifiers are somewhat movable in the sentence:

(71) a. We *eagerly* waited for our turn.
b. *After it began to snow*, we left.

Sometimes a short (1-2 word) adverbial will appear within the verb phrase:

(72) a. We do *occasionally* eat out.
b. She must have *often* donated her legal services.

Noun phrase adverbials, such as *a lot* in (73a), may be confused with direct objects. However, they will never become the subject of a corresponding passive sentence, as the ungrammaticality of (73b) shows:

(73) a. Harry entertains *a lot*.
b. **A lot* is entertained by Harry.

The adverbials that modify verbs can be grouped semantically according to the semantic roles that they express. The most common appear in Table 10. These roles should remind you of the meanings associated with adverbs and prepositions listed in our chapters on Major and Minor Parts of Speech.

SEMANTIC ROLE	EXAMPLES
Time	He left *early*.
	We left *on Monday*.
	I'll leave *when the moon turns green*.
Place	She stopped *there*.
	She relaxed *on the sofa*.
	She stopped *where the victim was found*.
Manner	The troupe exited *gracefully*.
	The troupe exited *with grace*.
Reason	He left *out of spite*.
	He left *because he was miffed*.
Purpose	He left *to milk the cow*.

TABLE 10: SOME SEMANTIC ROLES OF ADVERBIALS

Exercise

Draw brackets around each VP in the sentences below. Underline the headword and indicate the type of object, complement, or modifier that accompanies the headword.

a. Angela offered the job to her former rival.
b. Angela offered Archie the job.
c. We left for Austin in the morning.
d. In the morning, we left San Antonio for Austin.
e. Your proposal seems quite reasonable.
f. Eat this, if you dare.

Complex VPs: combinations of functions

Though we have illustrated separately each of the functions accompanying the verb head, the options in the formula stated at the beginning of this section allow for more than one function to appear with the verb. Consider, for example, the sentences in (74).

(74) a. She *has been speaking for three hours*.
(auxiliaries + head + PP-modifier)
b. Scott *offered Zelda a ride since her car was out of gas*.
(head + indirect object + direct object + adverbial clause modifier)
c. Hortense *never becomes angry*.
(adverb phrase + head + AP-subject complement)
d. The remains *will be shipped to Cleveland on Wednesday*.
(auxiliaries + head + PP-modifier + PP-modifier)

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GLOSSARY

ADJECTIVE PHRASE:phrase headed by adjective.
ADVERB PHRASE: phrase headed by adverb.
ADVERBIAL: an expression that functions like an adverb phrase, namely as a modifier of a verb, verb phrase, adjective, adverb, clause, or sentence.
APPOSITIVE NOUN PHRASE: NP that occurs as a "parenthetical aside" after its head noun.
AUXILIARY VERB (also called **AUX** or **HELPING VERB**): verb that accompanies a main verb in a clause.
BITRANSITIVE (also called **DITRANSITIVE**): verb phrase having a direct and an indirect object.
COMPLEMENT: one expression that grammatically completes another.
DEGREE ADVERB: adverb indicating the extent to which an adjective or adverb applies.
DITRANSITIVE: See **BITRANSITIVE.**
DO-SO TEST: a substitution test used to identify a verb phrase.
EMBED: to include one structure inside another structure.
FINITE: a clause whose verb is marked as present or past tense or which contains a modal. See **NON-FINITE.**
FUNCTION: role played by one expression in another.
GERUND: a non-finite verbal phrase whose first verb is in its Ving form and which functions in the range of NPs.
HELPING VERB: See **AUXILIARY VERB.**
INFINITIVE: a non-finite verbal phrase that functions in the range of NPs, modifiers, or complements.
INTENSIFIER: member of a small word class which intensifies the meaning of its head word.
INTRANSITIVE: verb that cannot take a direct object.
LOGICAL SUBJECT: in traditional grammar, a word or phrase referring to either the agent of an action or the understood subject of a sentence.
MODAL AUXILIARY: one of the auxiliaries *will*, *would*, *can*, *could*, *shall*, *should*, *may*, *might* and *must*.
NON-FINITE: a clause which is not marked for tense nor includes a modal. See **FINITE.**
NOUN MODIFIER: a noun that modifies a head noun.

NOUN PHRASE: phrase headed by a noun.
OBJECT: NP in VP required by transitive or bitransitive verb.
OBJECT OF A PREPOSITION: a noun phrase required by a preposition in a prepositional phrase.
PARTICIPLE: a verbal phrase whose first verb is Ven or Ving and which functions as a pre- or post-modifier in an NP.
PASSIVE TEST: a test used to determine the object of an active clause by making it passive.
PHRASE: a grammatical unit containing a head word and any complements or modifies.
PREPOSITIONAL PHRASE: phrase headed by a preposition.
PRO-SUB TEST: a test used to identify a noun phrase by substituting a pronoun for it.
PRO-VERB PHRASE: a form such as *do so* that replaces a verb phrase.
TOPICALIZATION TEST: a test used to determine whether a structure is a phrase by moving it to the beginning of its sentence.
TRANSITIVE: verb that requires a direct object.
VERB PHRASE: a phrase headed by a verb.
VERBAL PHRASE: a non-finite verb phrase that functions in ways other than as the predicate of a finite clause. See **GERUND**, **INFINITIVE**, **PARTICIPLE**.
WH-QUESTION TEST: a test to identify a noun phrase by replacing it with a wh-question word and then recasting the sentence that contains it as a question.
WHIZ-TEST: a test to identify a noun phrase with a head + postmodifier structure by inserting *who* or *which* plus a form of the verb *be* after the presumed head word.