

6 The Major Parts of Speech

KEY CONCEPTS

Parts of Speech

Major Parts of Speech

Nouns

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Adverbs

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INTRODUCTION

In every language we find groups of words that share grammatical characteristics. These groups are called “parts of speech,” and we examine them in this chapter and the next. Though many writers on language refer to “the eight parts of speech” (e.g., Weaver 1996: 254), the actual number of parts of speech we need to recognize in a language is determined by how fine-grained our analysis of the language is—the more fine-grained, the greater the number of parts of speech that will be distinguished. In this book we distinguish nouns, verbs, adjectives, and adverbs (the major parts of speech), and pronouns, *wh*-words, articles, auxiliary verbs, prepositions, intensifiers, conjunctions, and particles (the minor parts of speech).

Every literate person needs at least a minimal understanding of parts of speech in order to be able to use such commonplace items as dictionaries and thesauruses, which classify words according to their parts (and sub-parts) of speech. For example, the American Heritage Dictionary (4th edition, p. xxxi) distinguishes adjectives, adverbs, conjunctions, definite articles, indefinite articles, interjections, nouns, prepositions, pronouns, and verbs. It also distinguishes transitive, intransitive, and auxiliary verbs. Writers and writing teachers need to know about parts of speech in order to be able to use and teach about style manuals and school grammars. Regardless of their discipline, teachers need this information to be able to help students expand the contexts in which they can effectively communicate.

A part of speech is a set of words with some grammatical characteristic(s) in common and each part of speech differs in grammatical characteristics from every other part of speech, e.g., nouns have different properties from verbs, which have different properties from adjectives, and so on. Part of speech analysis depends on knowing (or discovering) the distinguishing properties of the various word sets. This chapter describes several kinds of properties that separate the major parts of speech from each other and de-

scribes several ways in which to identify a word's part of speech.

THE MAJOR PARTS OF SPEECH: NOUNS, VERBS, ADJECTIVES, ADVERBS

The major parts of speech contribute the major “content” to a message, and hence are sometimes called **content words**, as opposed to other parts of speech known as **function** or **structure words**. The content words are the ones that we see in newspaper headlines where space is at a premium and they are the words we tend to keep in text messaging where costs per word can be high. However, in most types of discourse, function words significantly outnumber content words.

We begin our discussion of each part of speech by examining its traditional definition, which is generally either semantic or functional. We evaluate the traditional treatment and suggest more effective means of classifying the word type by referring to its formal characteristics. These include a word's potential inflectional morphology, its actual derivational morphology, and the positions in phrases and clauses in which it may occur. For example, the word *kingdom* is a noun because it can be inflected for plural (*kingdoms*); it ends in the noun creating suffix *-dom*; and it can occur after *the* (*the kingdom*). We also examine some of the major functions of each part of speech. Each section concludes with a discussion of subclasses of the larger class.

Nouns

Traditionally, a noun is defined as a word that names “a person, place, thing, or idea” (Weaver 1996: 252). This defines the noun category according to what its members are assumed to typically denote, so it is a meaning-based or semantic definition. (Occasionally this definition gets abbreviated to “a noun is a person, place, or thing,” which makes no sense at all!) By Weaver's definition, *Madonna*, *Pittsburgh*, and *Godzilla* are all nouns, which is correct, so the definition provides a useful start. However, if we apply it precisely (and to be worth keeping, definitions should be precisely applicable), then the word *desk* is not a noun because it denotes, not **a** thing, but a whole class of things. Most nouns are like *desk* in this regard—*peacock* denotes not a peacock but all the peacocks living now, as well as all those that existed before, all those that will ever exist, and all the peacocks that we merely imagine. If we want to refer to one peacock, we have to add a modifier such as *a*—*a peacock*, cf. *a desk*, *a book*, *a hard drive*. We might revise our definition to take such nouns into account—“nouns name classes of persons, places, things, and ideas.” But now we require *Pittsburgh* to refer not to one

Pittsburgh, but to a whole set of them, which doesn't seem quite right.

So, there is something right about saying that nouns name classes of things, but there also seem to be nouns that name individual things. The nouns that name classes of things are **common** nouns; the nouns (and other types of expression) that name individual things are **proper** nouns: *printer* is a common noun; *Denver* is a proper noun. In English, we conventionally capitalize the initial letter of proper nouns. A common noun can be turned into a proper noun, in which case it should be capitalized; for instance, we have a friend whose dog's name is *Dog*. Similarly, we can distinguish *god* (of which there may be many) from *God* (which is presumed to be unique—at least in some contexts).

Proper nouns name individual things. But these things are many and varied. They include individual people (*Madonna*), individual animals (*Lassie*), individual places (*Addis Ababa*); individual things (*Earth*). We'll have a lot more to say about proper names in our chapter on Phrases.

We've said that common nouns name classes of things, but this needs development. Certainly, books are things, but is grease a thing? *Thing* seems to us to denote only things that can be individuated and counted—*thing one, thing two; one potato, two potatoes*, and so on. But *grease* doesn't seem to allow this; we don't (at least not typically) say *two greases*, or even just *one grease*. *Grease* is like *milk* and *information* and lots of other similar words in that it seems to denote stuff (physical or mental) rather than individual things. So, we might revise our definition of noun again, and say that “common nouns name classes of things and stuff,” or if you prefer to go uptown, “nouns name classes of entities and substances.” We'll return to this issue below when we distinguish more fully between count and non-count nouns.

Unfortunately, characterizing nouns as names of things and stuff only works if we limit our interpretation of “things and stuff” to just what nouns name, which makes it utterly circular. Moreover, if we answer “yes” when asked whether events, actions, states, characteristics, and relationships are things, then we must allow that verbs, adjectives and other parts of speech also name things. But surely that's a bit of a problem, because verbs have traditionally been assumed to name actions and states of being, adjectives to name characteristics, and prepositions to name relationships. Our focus on the typical meanings of nouns is what has gotten us into this fix. So we must look at other characteristics of nouns if we are to have any success in finding ways to identify them.

We've worked through the definition of *noun* as thoroughly as we did because we take definitions seriously. We think they should be accurate (remember our discussion of critical thinking in our Introduction to this

book): imagine looking up the word *dugong* in a dictionary and finding it defined merely as “a kind of animal.” Such a definition won’t help us use the word accurately. Likewise, if we are to use the word *noun* accurately, then we need to define it accurately. We need accurate definitions of parts of speech to allow us to accurately determine which categories words belong to. And this is important because a word’s part of speech determines whether and how it can be inflected as well as its roles in phrases and sentences. We want our definitions to provide us with criteria by which we can accurately determine the part of speech of any word we choose to examine. For better analyses we must consider the forms of words.

Formal characteristics of nouns

We approach the classification of nouns, and of the other major parts of speech, through a series of simple formal tests. However, because no single test will always lead to reliable results, part-of-speech identification requires multiple criteria and tests of different types. We cannot rely on a single test because our tests are like any scientific tests—sometimes they give false positive results (e.g., they tell us that we are ill when we aren’t) and sometimes false negatives (e.g., they tell us that we are well when we are ill). This is primarily due to the fact that each part of speech includes many sub-categories, each of which has slightly different properties from the other sub-categories and which therefore respond somewhat differently to our tests. As a result, we have to interpret our test results cautiously. We say that a word belongs to a particular part of speech to the extent that it passes the various tests for that part of speech.

ANALYTIC TEST 1. *A word may be a noun if it ends or can end in the plural inflection.*

Table 1 shows the spoken and written versions of the regular noun inflection:

Plural: morphophonemically /s/, /z/, and /ɪz/ or /əz/
spelled -s or -es (e.g., printers)

TABLE 1: THE REGULAR NOUN INFLECTIONS

The majority of English nouns accept the {-s} plural. The exceptions are the small subclass of nouns that refer to animals (*deer, fish*, etc.), nouns that denote stuffs (*grease, oatmeal, ice*), and nouns that mark the plural in idiosyncratic ways (*child/children, man/men, woman/women, cherub/cherubim, alumnus/a, alumni/ae*). (A general principle of language is that irregularity

tends to occur in the most frequently used or most over-learned items. As a result, teachers can assume that native English speaking students know many of the most frequently used irregular forms, although the irregularities may vary from dialect to dialect.)

Exercise

1. Provide the inflected plural forms of the following nouns (i.e., apply Analytic Test 1): *insect, email, hinge, solo, calf, disease, coil, promise, daisy*. Pay attention to the words' spelling and consult a dictionary if you are uncertain.

2. The following words have undergone zero derivation/conversion: *rip-off, snap, wipeout, update*. To each, apply Analytic Test 1 to show that it is (or can be) a noun.

ANALYTIC TEST 2. *A word may be a noun if it **actually** ends in a nominal derivational suffix.*

In English, the last derivational suffix on a word gives a strong clue to the word's grammatical class. If the last suffix is one of those listed in Table 2, then that is a good indication that the word is a noun.

SUFFIX	EXAMPLE
-age	acreage, mileage
-ance/-ence	tolerance, adherence
-ard	drunkard
-cy	decency
-dom	freedom
-er/or	teacher, actor
-ess	actress
-hood	knighthood
-ism	existentialism
-ist	existentialist
-ity	activity
-ment	amusement
-ness	truthfulness
-th	truth
-(a)tion	adulation, fruition

-ude

gratitude

TABLE 2: COMMON NOUN-FORMING DERIVATIONAL SUFFIXES

Exercise

Why do you think English has so many different noun-forming derivational suffixes? (Hint: look up several of them in a large dictionary.)

A common role of derivational morphemes in a language is to change words of one part of speech into related words of another part of speech. Thus the verb *tolerate* becomes the noun *toleration*; likewise, the verb *act* becomes the adjective *active*, which becomes the noun *activity*, by the addition of their respective suffixes. Sometimes derivation will change a word to a different subclass of the same part of speech, with a different, though related meaning. For example, the suffix {-hood} turns the noun *knight* into the noun *knighthood*, just as {-dom} turns the noun *king* into the noun *kingdom*. As we mentioned, only the **final** derivational suffix on a word determines its part of speech: *disestablishmentarianism* contains four suffixes; the last, {-ism}, makes it a noun. (Plural and genitive inflections may follow the derivational suffix without affecting Test 2.)

Derivational suffixes are less useful than inflections as clues to nouns because of their limited **productivity**, that is, how freely they may be added to words: {-er}, {-ness} and {-ity} are relatively productive noun-forming suffixes; we could, for example, add {-er} to a newly minted verb, e.g., *to iPod* to create the noun *iPodder*. On the other hand, the {-th} suffix in *depth* can no longer be used to derive nouns from adjectives; **lowth* from *low* + *th*, cf. *height* from *high* + *th* (the spelling is misleading here). (See Bauer 1983, 1988; Huddleston and Pullum 2002; Quirk, Greenbaum Leech and Svartvik 1972 for discussions of productivity.)

Moreover, as you know, English allows **zero derivation** (**conversion**, **category change**, and **functional shift**), by which a word's grammatical category may be changed without any change of form, such as the addition of a derivational suffix. Thus the verb *trade* has been converted to the noun *trade*, as illustrated by the ability of the latter to accept the plural inflection (*trades*). As a result of zero derivation, there will be many derived nouns that have no derivational endings. Such forms may appear to students to possess the semantic characteristics associated with their original class. For instance, the noun *kick* will (accurately) seem to name an action rather than a person, place, or thing.

This fact further illustrates the danger of semantic definitions.

Exercise

- Using the derivational affixes in Table 2, apply Test 2 to determine whether the following words are nouns: *certitude*, *probity*, *wealth*, *goodness*, *defilement*, *recency*, *boredom*, *editor*, *fragrance*, *characterization*, *transcendentalist*, *motherhood*.
 - Check a dictionary for the meanings and other properties of the noun-creating suffixes in Table 2.
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ANALYTIC TEST 3. *A word may be a noun if it can occur alone after a word that typically precedes nouns and together they constitute a complete phrase.*

Nouns can be identified by the company they can keep. Words that can occur immediately before nouns and together with a noun create a potentially complete noun phrase are:

- | | |
|---------------------|--|
| a. articles: | a, an (indefinite) (e.g., a bulldog)
the (definite) (e.g., the building) |
| b. genitives: | my, our, your, his, her, its, our, genitive noun phrases (e.g., my novel, our class, Sheila's desk, the man's car) |
| c. demonstratives: | this, that, these, those (e.g., that cup) |
| d. quantifiers: | some, any, all, no, every, numerals (e.g., every time, two pots)
ordinals (first, second, etc.) (e.g., first place) |
| e. most adjectives: | good, subtle, etc. (e.g., good work) |

Some of these forms—particularly demonstratives, quantifiers, and adjectives—can occur alone as phrases. It is their potential to combine with a noun to constitute a noun phrase that is relevant here.

The possibilities listed above form the basis for **frames**. Frames consist of context items, such as articles or demonstratives in the case of nouns, and a test position where we put the word whose part of speech we want to identify. For example, from the fact that an article and a following noun can constitute a complete noun phrase, we can create the frame [the____] to test for nouns. Here *the* is the context item and _____ is where we put

the item to be tested. These tests operate simply. Just put the word to be tested (e.g., *defense*, *kitchen*) into the test position, and if the combination of context item and test item forms a grammatical noun phrase, the test word is very probably a noun. For example, the fact that [the cattle], [the fish], [the furniture] are all grammatical expressions shows that *cattle*, *fish*, and *furniture* may all be nouns.

Exercise

Apply the frame [the____] to show that *apple*, *grievance*, *bellows*, *invitation*, and *implement* can all be nouns.

Words that cannot grammatically fill this test position are probably not nouns, for example, *[the defend], *[the the], *[the this], *[the never], *[the correctly]. (Remember, a * before an expression indicates that the expression is ungrammatical.)

Exercise

Using the frame [the____], show that *increased*, *there*, *also*, *as*, and *generate* are not nouns.

From the remaining context items in Analytic Test 3, we can create other frames for nouns, for example, [a(n)____], [your____], [my friend's____].

Exercise

1. Using the frames just above, determine whether *defense*, *kitchen*, *activity*, *active*, *certainty*, *certain*, *beating*, *demanding*, *limousine*, *depend*, and *luxurious* can be nouns.

2. Create five more frames to test for nounhood using the context items in Analytic Test 3. Then use your frames to determine whether any of the following words can be nouns: *force*, *graciousness*, *amplitude*, *va-porize*, *colossal*, *quietly*. Check your analysis by applying Analytic Tests 1 and 2 to these words.

Functional characteristics of nouns

Nouns have two main functions. The first, and perhaps less important one, is that of **modifier** of other nouns, e.g., *metal door*, *linguistics class*. The more dominant function is that of being the **head of a noun phrase**. Many functions traditionally associated with nouns (e.g., subject, direct and indirect object of clauses, object of a preposition, subject and object complement) are really the functions of noun phrases. Hence we will postpone discussion of these functions to our chapter on Basic Clause Patterns.

Subclasses of nouns

There are lots of different kinds of nouns, and in spite of our reservations about using meaning as a criterion to determine parts and subparts of speech, we will use aspects of meaning to distinguish the traditional subclasses of nouns, but we will back up the semantic distinctions by pointing out formal patterns that correlate with them. In fact, we can only be certain that meaning distinctions really exist in the language if they correspond to distinct formal patterns.

Proper nouns, as we have seen, are the words that best fit the traditional definition of a noun—i.e., a word that names a person, place, or thing. Thus your personal name names you (though it may also name other people); *Denver* names the capital city of Colorado, and *Colorado* names the state that Denver is the capital of—both of which are places and things. Note that proper nouns are spelled with an initial capital letter, and if the proper name consists of more than one word, e.g., *the Statue of Liberty*, then all the major words are spelled with initial capitals. We will deal with complex proper names like this in our chapter on Phrases. Some texts may vary in their treatment of nouns. For example, McBeth (2001) sometimes capitalizes *Gay* and sometimes does not, and Gee (1996) distinguishes *discourse* from *Discourse*.

Common nouns name classes of things. Individual physical objects are the most straightforward instances of things, and the words that name classes of such things are indeed generally nouns, e.g., *book* names the class of books and *hard drive* names the class of hard drives. Nouns that name classes of physical things are called **concrete nouns**. Other examples include *sneeze*, *floor*, and *paper*.

Not all things are physical; some, like ideas, exist only in our minds. Words for classes of things that exist only in minds, e.g., *goodness*, *truth*, *beauty*, and *reason*, are called **abstract nouns**. Abstract nouns tend to be non-count (see below) and to end in certain derivational suffixes, e.g., {-ness}, {-ity}, {-th}, {-ude}.

Common nouns may also name classes of collections of things; for exam-

ple, *platoon* names the class of a particular type of collection of soldiers; *team* names the class of collections of people gathered together for some common purpose. Nouns that name classes of collections are called **collective nouns**. Other examples include *army* and *congress*. In American English, collective nouns normally take a singular verb (e.g., *The jury is out*), while in British English they take a plural (e.g., *The jury are out*). The American variety sometimes uses the plural to suggest lack of unity within the group (e.g., *The jury are divided*). Pronoun substitutes for collectives are also normally singular in American and plural in British English.

An important subdivision of nouns, particularly for people learning English as a second language, is between **count** and **non-count** (also called **mass**) nouns. Some non-count nouns are thought of as representing things as if they were undifferentiated masses whose parts are not identified as discrete units (*rice, sugar, milk, news*). Count nouns represent entities that can be individuated and counted (*typewriter, diskette, page*). It follows that a piece of news is still news, but a piece of a diskette is not a diskette.

Formally, count nouns may be singular and plural (*cup, cups*); non-count nouns are typically singular (*information, *informations*). Count nouns may be preceded by the indefinite article (*a day*); non-count nouns may not (**a furniture*). Count nouns may be preceded by *many* (*many bikes*), while non-count nouns may not (**many dust*). Count nouns may be preceded by *not many* (*not many kittens*); non-count nouns may not be (**not many wealth*). Non-count nouns may be preceded by *not much* (*not much rice/wealth*); count nouns may not be (**not much books*).

If the head of the subject of a sentence is a non-count noun, then the verb will be in the singular (*The milk is in the fridge*), but if the head is a count noun, the number of the verb will depend on the number of the noun (cf. *The bottle is in the fridge; The bottles are in the fridge*).

Zero derivation can recategorize count and non-count nouns. Non-count nouns may become count nouns, and as a result may be pluralized. However, they undergo a semantic shift—for example, to either *type of something* (e.g., *the cheeses made in Wisconsin*) or *unit of something* (e.g., *three coffees*). Analogously, count nouns may be recategorized as non-count nouns, but they also undergo a semantic shift, for example, from individuals of the count noun category (*He caught a fish*), to stuff derived from the individuals (*He likes to eat fish*).

Exercise

1. Using the grammatical characteristics just discussed, say whether

each noun in the following list is count, non-count, common, proper, concrete, abstract, or collective. Some may belong to more than one of these subclasses. For each one that does, say which subclasses it belongs to: *aluminum, class, college, couple, criterion, excellence, information, member, Michigan, nomination, patience, platoon, tranquility, troop, Yosemite*.

2. Some non-count nouns denote substances made up of small discrete particles, and we can speak of individual particles or numbers of them by modifying the noun with an expression of the form *X of Noun*, e.g., *grain of wheat, kernel of corn*. Identify ten more such nouns and the expressions that denote their particles.

3. Other non-count nouns denote what Huddleston and Pullum (2002: 336) refer to as “aggregates,” that is, instead of denoting masses composed of very similar particles, they denote aggregates of miscellaneous things that typically share some function. These words also have special individualizing words, e.g., *piece of furniture, item of apparel*. Identify ten more such nouns and the expressions that denote their individuals.

4. We also have special expressions for the portions we typically divide some stuffs into, e.g., *slice of cake, loaf of bread, wedge of pie*. Identify ten more such nouns and the expressions that denote their typical portions.

5. Using a selection of count and non-count nouns, determine which subclass the following expressions may directly modify: *enough, little, each, neither, all*. For example, *sufficient* can modify non-count but not (singular) count nouns—*sufficient money* but **sufficient dollar*.

6. The count/non-count distinction poses difficulties for non-native speakers of English, at least in part because languages do not all make the distinction in the same way. As a result, nouns that are translation equivalents may belong to different subcategories. Thus *information* is non-count in English, but its translation equivalents in French and Italian are count. Check a piece of text written by a learner of English to see whether the writer has full control over the count/non-count distinction.

Some remarks on the genitive case

The genitive case is typically indicated by the suffix {-s}, e.g., *Maria's success*. The genitive expression modifies a following noun: *Maria's* modifies *success*. Its spelling is generally written as -'s (*the book's cover*) if the expression it is attached to is singular or is an irregular plural (*the children's toys*), and either just an apostrophe if the expression it's attached to ends in *s* (*the Jones' house*), though editorial practice varies on this and some editors use -'s (*the Jones's house*).

While the genitive is generally spelled as -'s or -s', there are some specific exceptions. Several of the personal pronouns, as we'll see in our chapter on Minor Parts of Speech, have genitive forms ending in -s: *ours*, *yours*, *theirs*. Note that there is no apostrophe in the spelling of these forms. This is particularly noteworthy in *its*, the genitive of *it*, which is frequently misspelled as *it's*. This error is due to two factors: first, *its* violates the general pattern of spelling the genitive with an apostrophe (though it is consistent with the sub-pattern that pronouns do not include the apostrophe); second, *its* may be confused with the word *it's*, which is a contraction of *it is*. Note that *whose*, without the apostrophe, is the genitive of the pronoun *who*, while *who's*, the contraction of *who is*, is parallel to *it's*.

Like the regular plural {-s}, the genitive has three allomorphs: [s] after voiceless segments (*Dick's*), [z] after voiced segments (*Toni's*, *Tom's*), and [əz] or [ɪz] after sibilants (*Francis's*).

The genitive is often referred to as the possessive case. However, the genitive denotes far more than just possession. For example, *Bill's* in *Bill's TV show* is in the genitive, but besides possessing the TV show, Bill might also have been its producer, director, star, gaffer, key-grip, fan, or occasional viewer. To avoid too narrowly characterizing the meaning of the genitive, we prefer this term to possessive.

Exercise

Briefly discuss the possible meaning relations between the genitive expression and the noun it modifies in:

- a. the candidate's advisors
 - b. the book's author
 - c. Andy's pottery
 - d. the bird's egg
 - e. the company's CEO
 - f. the country's attackers
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The genitive case has generally been regarded as an inflection suffixed to nouns and pronouns. And while it is true that pronouns may take the genitive inflection, it is more accurate to say that noun phrases, not nouns, may take it. Note where the genitive inflection is attached in *Oscar's plays*, *Humpty Dumpty's fall*, *the kid's skateboard*, *the kid next door's dog*, *the guy you broke up with's car*. Unlike the plural inflection, which is suffixed to the head noun of an NP, the genitive inflection is suffixed to the end of the NP.

Although *s*-genitives occur on nearly all noun phrases, sometimes the alternative *of*-phrase sounds stylistically more natural; cf. *the cause of the accident* vs. *the accident's cause*. In English, the inflected genitive is most comfortable with animate entities.

Verbs

Verbs can be subdivided into **main** and **auxiliary verbs**. We will treat the various types of auxiliaries, such as *may*, *might*, and *should*, in our chapter on Minor Parts of Speech and will concentrate here on **main verbs**, i.e., those which may occur alone in a clause. Traditional grammars define verbs semantically, e.g., as words that represent **activities** (*grow*, *kiss*, *freeze*, *run*) and **states** of being (*be*, *have*, *resemble*). States are unchanging situations while activities are situations in which change occurs. (Activity verbs are also called **dynamic** verbs, though the terminology is far from consistent.) State verbs typically have to do with existence and static relationships. Just as nouns denote classes of entities and stuff, verbs denote classes of states and activities.

As with most meaning-based definitions, this one is a tad simplistic. For instance, nouns derived from verbs through zero derivation (e.g., *strike*, *kick*, *throw*) maintain their sense of action, as nouns derived from verbs by derivational affixing do (e.g., *action*). Likewise, verbs derived from nouns—e.g., *pot*, as in *to pot plants*—may appear to retain some of the entity-naming sense they had as nouns. In addition, students occasionally classify certain adjectives as verbs, especially those adjectives that suggest activity (e.g., *vigorous*, *playful*, *cruel*), and we've had a student who classified the preposition *as* as a verb because it denoted a relationship, as verbs often do. Additionally, adjectives and other types of expressions may name states, cf. *to sleep* and *asleep*. Nonetheless the semantic division of verbs is a good place to start our discussion, though we'll refine the activity/state division in the exercises in this section.

As we noted in our discussion of nouns, it is important to correlate a semantic distinction with distinct formal patterns. The distinction between activity and state verbs correlates with whether or not a verb can occur in the progressive aspect: activity verbs can (*Oscar is growing tall*); state verbs cannot (**Oscar is resembling his father*).

Exercise

1. Using the progressive aspect test, determine for each of the following verbs whether it is an activity or a state verb: *read, examine, email, own, buy, know, dry, love, be, become*. Did you run into any problems? How did you solve them?
 2. State verbs are particularly common in academic writing. Confirm this by examining a selection of texts from that genre. Why do you think state verbs are so common in this genre?
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We saw that nouns may shift between subcategories, so it should be no surprise to find verbs shifting between the state and activity subcategories. For example, *be* is a state verb in *Oscar is weird* but an action verb in *Oscar is being weird*, as its occurrence in the progressive shows. The former sentence means that Oscar is generally or characteristically weird; the latter means that he is acting weird, though we can expect him to snap out of it eventually.

Exercise

1. The distinction between permanent and temporary characteristics is an important one. Compare *Tigers are fierce* with *Tigers are tired*. The former sentence is grammatical and unremarkable. It represents a general characteristic of the class of tigers. The latter sentence is odd in that it seems to attribute a characteristic we would normally assume to be temporary as if it were a permanent characteristic of tigers in general. The permanent/temporary distinction is exploited in dictionaries. Look up *tiger* and four other words in a dictionary and discuss how this distinction is reflected in how they are defined.
 2. For students who know Spanish. Spanish has two verbs that correspond to English *be, ser* and *estar*. What is the rule usually given for when to use each of these verbs? Check your answer in a Spanish dictionary, grammar, or textbook.
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Like all words, individual verbs may have more than one meaning. Consequently, we might expect one meaning of a verb to represent an activity and another meaning of the verb to represent a state. *Smell* is such a verb. The sentence *John is smelling the roses* is grammatical in the progressive

and therefore has an activity interpretation. Now compare *The roses smell musty*, which is non-progressive and grammatical, with **The roses are smelling musty*, which is progressive but ungrammatical. From data like this we must conclude that *smell* also allows a state interpretation.

There are many more subclasses of verbs and we present some of them in the following exercises to allow you to develop your understanding of verbs to the degree you need or want.

Exercise

1. Just on the basis of your intuitions, classify the following verbs as state verbs or activity verbs: *cost*, *depart*, *approve*, *approve of*, *remember*, *remain*. What difficulties did you experience in classifying these verbs semantically? Check your classification by using the progressive test.
2. Look up the word *appear* in a good desk dictionary. How many different meanings does it have? Identify which of these meanings indicate states, changes of state, or actions.
3. *Clean* and *tidy* are activity verbs. What change of state does each describe? Paraphrase the verbs using the adjectives *clean* and *tidy*. Think of several more such verbs and their associated adjectives.
4. Which kind of verb (state or activity) can be used to answer the question, *What did X do?* Supply example sentences, both grammatical and ungrammatical (e.g., *She learned American Sign Language* vs. **She knew American Sign Language*) to support your answer.
5. A distinction related to change of state is between **telic** and **atelic** verbs. Telic verbs represent events that have a natural end point, the accomplishment of some purpose, or a change of state, e.g., *make*, *evaporate*. (These are also called **accomplishment** or **resultative** verbs.) Once something is made or has evaporated, the making and evaporating processes must stop for that thing. As with change of state verbs, telic verbs in the progressive represent processes before their completion. *The water is evaporating* implies that the water has not yet fully evaporated. Atelic verbs represent events as having no natural end-state or product, e.g., *golf*, as in *The CEOs are golfing*. A verb may be telic on some occasions, e.g., *The children are playing a game of*

chess, but atelic on other occasions, e.g., *The children are playing*. For each of the following sentences decide whether it represents a telic or an atelic situation and justify your decision.

- a. She wrote a poem.
- b. She writes poetry.
- c. The water froze.
- d. The water is freezing.
- e. The plane arrived.

6. The count/non-count distinction in nouns is similar to the telic/atelic distinction in verbs. Count nouns represent classes of bounded entities; telic verbs represent classes of bounded situations. Non-count nouns represent unbounded classes of things or substances; atelic verbs represent unbounded classes of events. Thus, a piece of a chair is not a chair, but a piece of paper is still paper. Similarly, writing a piece of a poem is not the same as writing a poem, though a piece of writing is still writing. What conclusions might you derive about human cognition from this similarity between nouns and verbs?

7. Identify all the main verbs in Exercise 6 just above. Then classify each main verb as state or activity. Which kind of verb predominates in that piece of text? Can you divide the text into two sections, each with a different rhetorical purpose? Do the verbs in the two sections differ? Why do you think that might be?

8. We can divide the category of activity verbs into those that represent events that take just a point of time (**punctual** verbs), e.g., *tap*, and those that take a period of time (**durative** verbs), e.g., *read*. In the progressive, punctual verbs strongly suggest repeated action. *Oscar is tapping his fingers impatiently* describes multiple finger taps. But *Oscar is reading* strongly suggests a single, continuous episode of reading. Put each of the following verbs into the progressive, then determine whether the resulting expression denotes multiple, repeated events, or a single, continuous activity: *punch, beat, nap, flap, wink, close, run, work*.

9. **Change of state (process)** verbs are yet another subclass of activity verb. As their name suggests, they describe change from one state to another, e.g., *melt*. If something melts then it changes from a solid to a liquid state. But notice how such verbs are interpreted when they

are in the simple past tense (*The ice melted* describes the completed change) and in the progressive aspect (*The ice is/was melting* describes the melting in progress but not yet complete). By comparing their interpretations in the past tense and the progressive, show that the following verbs are also change of state verbs: *freeze, evaporate, arrive, ignite, die*.

10. A change of state verb simply represents some entity as undergoing or having undergone a change from one state to another. However, sentences may also include information on what caused the change of state; compare *The cook thickened the sauce* with *The sauce thickened*. The former sentence tells us who caused the sauce to thicken; the latter does not. Let's call clauses that include information on the cause of a change of state **action** clauses, and their verbs **action** verbs. (Remember, activity and action verbs are different.) Generally, simple change of state clauses are intransitive with the entity undergoing the change of state represented as the subject, while action clauses are transitive with the subject representing the cause of the change of state and the object representing the entity changed. Here are some instructions from recipes whose verbs are action verbs:

- a. Preheat oven to moderate.
- b. In a saucepan melt the butter.
- c. Boil the milk.
- d. Thicken the sauce.
- e. Brown the meat.
- f. Dissolve the sugar in the boiling water.

Why do you think that the instructions in recipes use so many action verbs?

11. Here are some sets of verbs from the instructions in other recipes: (a) *peel (potatoes), core (apples), bone (meat)*; (b) *cube (meat)*; (c) *cut (meat), chop (vegetables)*; (d) *place (ingredient in pot), layer (ingredients in pot)*; (e) *add (ingredient to pot)*; (f) *fry, sauté, broil*; (g) *boil, simmer*. What information, other than simply "do something to something," do the verbs in each group convey?

12. Think of ten verbs that include the meaning "movement to/from somewhere," for example, *go, come, run, and bicycle*. What information other than just movement to/from somewhere do these verbs include? If you know Spanish, translate *float* (e.g., *The log floated into*

the lake) and *roll* (e.g., *We rolled the barrel off the truck*) into that language and note how that other information is expressed. How would you describe the difference between English and Spanish in how they express that other information?

13. *Begin, start, keep, continue, stop, finish, and quit* denote parts, facets, or aspects of events (which is why they are called **aspect verbs**). Which aspect of events does each of the verbs in the list denote?

14. *Say, tell, announce, ask, answer, argue, deny, sing, yell, and whisper* all have to do with communication. What information, other than just “communicate,” does each verb convey? Communication verbs like these are particularly common in conversation, news, and fiction. You can check this for yourself by taking samples of each genre. Why do you think communication verbs are common in these genres?

15. *Know, think, feel, want, and mean* represent mental states and activities. These are particularly common in conversation and fiction. Collect some samples of these two genres, identify the main verbs in your samples, and determine how many are mental verbs. Why do you think conversation and fiction are particularly rich in these verbs?

The semantic divisions of verbs represented in many of the exercises just above is only one of many. (See Biber et al. 1999, Cruse 2004, Frawley 1992, and Gregory 2000, Quirk et al. 1972, for various categorizations.) Clearly, because their meaning is so extraordinarily complex, the semantics of verbs may confuse students. It is simpler to use formal characteristics to identify verbs.

Formal characteristics of verbs

We must first distinguish formally between main verbs and auxiliary verbs. The main verb can appear by itself in a verb phrase; an auxiliary verb regularly appears only before a main verb. Consider sentence (1):

- (1) The building collapsed onto the streets.

In this sentence, *collapse* is the main verb; it cannot be removed from the sentence without producing an ungrammatical result (e.g., **The building onto the streets*). The main verb will always be the farthest to the right in any

series of English verbs (e.g., *The building may have **collapsed***). In addition, auxiliaries can be inverted in questions (e.g., *Will the building collapse?*), while main verbs cannot (e.g., **Collapsed the building?*).

Just as we did with nouns, we use formal analytic tests to determine which words are verbs. English verbs potentially allow four inflections:

- a. 3rd person singular present tense (spelled -s or -es and pronounced /s/, /z/, and /ɪz/ or /əz/).
We symbolize verbs with this inflection as **Vs**.
For example, *Harris **bakes** strudel regularly.*
- b. Past tense (in regular verbs, spelled -d or -ed and pronounced /t/, /d/, and /ɪd/ or /əd/).
We symbolize verbs with this inflection as **Ved**.
For example, *Harris **baked** strudel last night.*
- c. Ing-form (spelled -ing and pronounced /ɪŋ/).
We symbolize verbs with this inflection as **Ving**; it normally occurs with a form of the auxiliary verb *be*, or with a similar verb.
For example, *Harris **is baking** strudel.*
- d. En-form (in regular verbs, spelled and pronounced identically to the past tense).
We symbolize verbs with this inflection as **Ven**; it normally occurs with the auxiliary verb *have* to create the **perfect** aspect, or with forms of *be* to create **passive** sentences.
For example, *Harris **has baked/eaten** strudel.* (Perfect aspect sentence.)
For example, *Harris **was pursued/eaten** by a lion.* (Passive sentence.)

TABLE 3: VERB INFLECTIONS

Using these inflectional possibilities, we can create a test for verbhood:

ANALYTIC TEST 4. *A word may be a verb if it can take some or all of the four types of verb inflections: **Vs**, **Ved**, **Ving**, **Ven**.*

Traditionally, Ving is called the **present participle**. When this form occurs with a form of the auxiliary *be*, it is part of the **progressive aspect**, which typically denotes an activity in progress, as in *Harris is baking*. As a marker of the progressive, {-ing} is usually regarded as an inflection. However, Ving also occurs in structures traditionally known as **gerunds**, e.g., ***Parting** is such sweet sorrow*. When {-ing} is part of a gerund, it is regarded as a derivational morpheme because its addition causes a change in part

of speech, namely from verb to noun. Ving forms may also be adjectives derived from verbs, for example, a *crying* baby, a *peeping* tom. Note that a “present” participle, that is, the Ving form itself, whether as the progressive or as an adjective, tells us nothing about when the activity occurred. Whether the situation represented by Ving took place in the past, is occurring at the time of speaking, or may occur in the future, is indicated by other parts of the clause, such as by tense marking on an auxiliary verb. Gerunds are similar: the events are not related to the time of speaking.

Traditionally, Ven has been called the **past participle** form of the verb. When the Ven form occurs with the auxiliary *have* to create the perfect aspect or with the auxiliary *be* to create the passive, it is usually regarded as an inflection because it does not cause a change in part of speech. However, there are adjectives in English that are formally identical to past participles, e.g., *broken heart*. In cases like this the affix is to be regarded as a derivational morpheme because it does cause a change of part of speech. For some verbs, the past participle form and the derived adjective form differ, e.g., *A drunken sailor*; *She has drunk all the martini*. Again, although the Ven form is traditionally called a “past” participle, like the “present” participle, the situations it represents are not related to the time of speaking.

Exercise

By adding the Vs, Ved, Ving, and Ven inflections show that each of the following words can be a verb: *provide*, *help*, *demonstrate*, *outline*, *promote*.

Tests based on inflections are so valuable that some traditional grammar books, especially those used to teach non-native speakers, provide extensive lists of the **principal parts** of verbs. Rather than using inflections to identify verbs, however, these grammars often suggest that students memorize these vast lists. A sample of such a list appears below as Table 4:

V Base Infinitive	Vs Present	Ved Past	Ving Ing-form Progressive	Ven En-form Past Participle
start	starts	started	starting	started
clean	cleans	cleaned	cleaning	cleaned
try	tries	tried	trying	tried
run	runs	ran	running	run
bring	brings	brought	bringing	brought
see	sees	saw	seeing	seen
throw	throws	threw	throwing	thrown
shrink	shrinks	shrank	shrinking	shrunk
hit	hits	hit	hitting	hit

TABLE 4: PRINCIPAL PARTS OF SELECTED VERBS

Table 4 also shows some important properties of verb inflections. First, certain inflections sometimes require changes in the spelling of the root (e.g., *tries*, *hitting*). Phonologically, these words follow the regular patterns noted above. Second, for regular verbs—e.g., *start*, *clean*, *try*—the past tense and Ven-forms are identical in sound and spelling. Irregular verbs—those which, for historical reasons, differ from the general pattern—display a variety of inflectional differences, but almost exclusively in the Ved and Ven-forms. With very few exceptions (e.g., *is*, *has*, *does*), Vs and Ving forms fit the general pattern. Moreover, some irregular verbs, such as *bring* and *hit*, follow the same pattern as regular ones by having identical Ved and Ven forms, though these are not formed by adding {-ed}. Besides varying among themselves in the formation of Ved and Ven forms, irregular verbs sometimes have dialect variants. For instance, *shrink* has the alternate past *shrunk*. Although *shrank* resembles the historically older form of the verb, *shrunk* reflects a pressure in modern English to make irregulars more regular, especially by making the Ved and Ven forms identical. Indeed, the archaic *shrunk* is used now only as an adjective, e.g., *shrunk* head. Only a few modern English verbs, such as *broken* and *frozen*, actually still use {-en} for the past participle form, though dialects vary—British English uses *mown* as past participle, whereas American English uses *mowed*. Finally, irregular verbs often have regional and social variants that may be stigmatized, particularly in academic settings. Students are often, unfortunately and inaccurately, considered slow or ignorant if they use *dove*, *drunk*, and *seen* as the past tense forms of *dive*, *drink*, and *see*. We discuss these issues in our chapters on Usage and Language Variation in Book II.

Enormous lists of principal parts of verbs may be useful for reference purposes or for non-native speakers, but they are not a generally useful pedagogical tool. For native speakers, rote memorization of such lists is a mind-numbing pursuit of trivia. Knowledge of the basic patterns discussed above, along with normal native-speaker intuition will allow any native English speaking student to produce the principal parts of all common English verbs. For instance, the Ved form can be determined by placing the verb in a simple sentence beginning with the word *yesterday* (e.g., *Yesterday I drank a gallon of grapefruit juice*). The Ven form can be obtained by placing the verb in a simple sentence following the auxiliary *have* or *has*, for example, *I have run two miles*.

Exercise

1. Identify which of the words below are verbs, using as many of the inflectional criteria above as possible. Do not be surprised if, with a little ingenuity, you can turn almost any word into a verb. Such potential innovations attest to the power of zero derivation and to the limitations of semantic definitions: *eraser, elbow, sense, fork, several, even, easy, always, up*

2. Because of historical changes in English, formerly inflectional morphemes have come to be derivational morphemes that are pronounced the same as their inflectional counterparts. This change affects two forms. First, {-ing} has come to occur on nouns formed from verbs, as in *the grumblings of the sailors*. Note that the {-ing} word may be pluralized and/or preceded by *the*. Second, both {-ing} and {-en} have become adjective endings in some words, as in *more interesting remarks* and *very frozen pipes*. If a word can be modified by *very, quite, and rather*, it is an adjective or an adverb, not a verb. Remember also the kinds of words that precede nouns. Consider the sentences below and argue that the italicized expression is or is not a verb.

- a. Frederick's constant *working out* in the gym
- b. The inner *workings* of a computer
- c. A *shrunk* head
- d. Juan's *penetrating* observations

ANALYTIC TEST 5. *A word may be a verb if it actually ends in a verbal derivational affix.*

Table 5 lists some typical verbal derivational affixes:

SUFFIXES	EXAMPLES
-ify	magnify
-ize/-ise	canonize, advertise
-en	lighten
-ate	participate, fluctuate

TABLE 5: TYPICAL DERIVATIONAL VERB SUFFIXES

Exercise

- Using the list of affixes in Table 5, show that the following words are verbs: *traumatize*, *customize*, *sanitize*, *stupefy*, *electrify*, *brighten*, *darken*, *anticipate*, *punctuate*.
 - Check a dictionary for the meanings and grammatical characteristics of each of the suffixes in Table 5.
 - For each italicized word below, add, remove, or change one or more derivational affixes to make it into a verb. Double-check your answer by using inflectional criteria. *Assassin* (noun), *tight* (adjective), *critical* (adjective), *alive* (adjective), *fat* (noun, adjective), *extermination* (noun), *harmony* (noun).
-
-

ANALYTIC TEST 6. *A word may be a verb if it can be immediately preceded by words that typically precede verbs.*

Verbs have the potential to occur immediately after several classes of other words:

- auxiliaries (*be*, *have*, and *do*)
- modals (*will*, *would*, *can*, *could*, *may*, *might*, *shall*, *should*, and *must*)
- to* (infinitival) (e.g., *to have* and *to hold*)

We can create test frames based on these patterns, for example, [to____] (e.g., *to be*), [_{VP}do____] (e.g., *did endure*).

Exercise

Using the frames [_{VP}will_____] and [_{VP}do_____], show that *recommend*, *find*, *know*, *assume*, and *inquire* can all be verbs.

It is important to use as many such frames and contexts as possible. The reason for this is that many of the context words can be ambiguous (e.g., *to* may also be a preposition) and they may appear before other parts of speech. As an example, let us ask whether *apply* can be a verb.

- (2) a. I am applying.
b. I have applied.
c. I will/can/should apply.
d. I want to apply.

These examples show that *apply* can be a verb. Also, to apply test frames, we must allow the inflections of the word under scrutiny to vary to fit the specific test, for instance, the test word in [have_____] must be in past participle form, e.g., *have sown*. Finally, we must make certain that the test sentences are appropriate. For instance, *to* can have a directional meaning, as in *We drove to Paris*. Confusing the preposition *to* with the infinitive *to* will lead to wrong results. The infinitival *to* in (2d) has no meaning; it serves only to mark a verb. (To make matters more complex, there is a third *to* that indicates purpose, as in *I drove to relieve tension*. When it is used in this way, *to* can be followed by a verb.)

Exercise

1. Create five more frames based on the context items in Analytic Test 6 and apply them to *attend*, *participate*, *give*, *conclude* to show that they can be verbs.

2. Using Analytic Test 6, determine which of the words *tall*, *stretch*, *underestimate*, *replace*, and *playful* can be verbs.

3. Using the verb frames in the text and those you created yourself, identify the verbs and non-verbs among the following words: *individual*, *learn*, *engage*, *various*, *actually*, *accomplish*.

Functional characteristics of verbs

Main verbs have one function, to be the head of a verb phrase (VP). As such, they may be preceded by auxiliaries, followed by objects and complements, and modified in various ways. As in the case of noun phrases, a VP may consist of a single word (e.g., *Harris left*). We will deal with VPs in our chapter on Phrases.

Formal subclasses of verbs

Verbs may be (and in dictionaries for native speakers of English, usually are) subdivided into **transitive**, **intransitive**, and **linking**. Transitive verbs (e.g., *see*, *arrest*) require a direct object, which typically takes the form of a following noun phrase (e.g., *The police arrested Steve Biko*). Intransitive verbs (e.g., *die*) do not take a direct object (e.g., *He died*). Some verbs may be transitive in some sentences and intransitive in others. For example, *run* is intransitive in *She runs regularly* but transitive in *She runs the company*. Linking verbs (*be*, *become*, *seem*) must be followed by a **subject complement**, which may appear as either a noun phrase (e.g., *He is a nurse*) or an adjective phrase (e.g., *She is aware of the situation*). Traditional grammars often refer to the former as a **predicate nominal** and to the latter as a **predicate adjective**. In either case, with a linking verb, the subject and the complement both refer or apply to the same individual (*he—a nurse*; *she—aware of the situation*).

Exercise

1. Check a dictionary to see which of the following is regarded as transitive, which intransitive, and which both: *lift*, *anticipate*, *arrive*, *endure*.
2. Check a dictionary to see if it distinguishes linking verbs from other types. Look up the verbs *be*, *become*, and *seem* and report on whether and how they are categorized as linking verbs by your dictionary.
3. Compare the part of speech and subcategory information given about *give* and *send* in a dictionary for native speakers and in one for English learners.

Adjectives

While traditional grammars usually define nouns and verbs semantically, they

often shift to functional criteria to characterize adjectives. A typical definition of adjective is “a word that modifies a noun or pronoun.” (Occasionally you will see adjectives defined as “words that describe nouns,” which makes no more sense than saying that “nouns are persons, places, and things.” If adjectives describe anything, it is whatever the nouns they modify denote.) While we might criticize the traditional definition for changing from meaning to function, it is more appropriate to determine whether it leads to reasonably successful identification of adjectives.

The definition holds good in simple cases, such as *old shoes*, *offensive remark*, and *matters inconsequential*, though in the last case, students may have trouble recognizing the second word, rather than the first, as an adjective. But in each case, the adjective does modify a noun, which serves as the head of the phrase. However, words that are clearly not adjectives may modify nouns; for instance, *stone* in *stone wall* is, by formal criteria, a noun and not an adjective (cf. *stones* and *stone’s*). Likewise, *the* in *the wall* shows none of the formal characteristics of adjectives, though it clearly modifies the noun, *wall*. In a nutshell, the fact that a word modifies a noun is not a sufficient reason to call it an adjective.

The traditional, functional definition suffers also because it claims that adjectives may modify pronouns. Clearly an adjective cannot modify a pronoun in any of the examples below:

- (3) a. *old them
- b. *offensive it
- c. *they inconsequential

To justify the inclusion of pronouns, grammarians refer to a different use of adjectives, as in sentences (4) and (5):

- (4) The judge was late.
- (5) She was ill.

In (4) and (5), the adjectives *late* and *ill* are **predicate adjectives** or **subject complements**. But the use of these separate labels suggests—correctly—that such uses of adjectives are really not instances of modification at all, but rather of complementation. Any student who tries to relate such examples to clear cases of modification will become befuddled.

Notice also the difference in the meaning of *late* in (4) and in *the late judge*. While most adjectives can occur as noun modifiers and as predicate adjectives, there are some that are specialized for only one of these two roles. For

example, *former* can only occur as a noun modifier (*The former senator* vs. **The senator is former*) and *alive*, *asleep*, *askew* can occur only predicatively (**The alive/asleep cat* vs. *The cat is alive/asleep*).

Exercise

Check the words *former*, *asleep*, *alive*, *askew* in your dictionary to see if their limitations are mentioned. Then check them in a dictionary designed for learners of English as a second language, such as the Cambridge International Dictionary of English, to see how they are treated there.

Clearly, adjectives may modify nouns. But because the ability to modify a noun is neither a necessary nor a sufficient basis for adjectivehood, we must augment the functional criteria with more reliable formal ones.

Formal characteristics of adjectives

The major formal characteristic of an adjective is its ability to be compared:

ANALYTIC TEST 7a. *A word may be an adjective if it can be made comparative and/or superlative by the addition of the inflectional suffixes {-er} and {-est}. (Applies to short words.)*

ANALYTIC TEST 7b. *A word may be an adjective if it can be made comparative and/or superlative by being modified by **more** and **most**. (Applies to longer words.)*

Exercise

Create four test frames for adjectives based on Analytic Tests 7a and 7b. Apply your frames to show that *traditional*, *perfect*, *unfavorable*, *similar*, and *subordinate* may be adjectives.

Comparison is a semantic change in adjectives that is regularly signaled by formal means. The uninflected forms are in the **positive degree**; the inflected forms are in the **comparative** and the **superlative**.

POSITIVE	COMPARATIVE	SUPERLATIVE
old	older	oldest
beautiful	more beautiful	most beautiful

A short adjective (one of 1-2 syllables) takes the {-er} and {-est} inflectional endings. Longer adjectives, including some 2-syllable words such as *alone*, may be modified by *more* and *most*, a class of words called **intensifiers** which includes *very* and *quite*.

Exercise

Using Analytic Tests 7a and 7b, identify which of the following words can be made comparative and/or superlative: *strong, honest, retaliate, harsh, uncommon, local, intensify*.

While these criteria are very powerful, they do not work for all adjectives, especially scientific adjectives such as *nuclear* and *barometric*. Fortunately, other types of tests are available:

ANALYTIC TEST 8. *A word may be an adjective if it actually ends in an adjectival derivational suffix.*

Table 6 lists some of the major adjectival suffixes in English.

-ish	boorish, skittish
-al	comical, alphabetical
-ar	nuclear, circular
-ful	cheerful, careful
-some	winsome, awesome
-y	funny, uncanny
-ic	choleric, atmospheric
-able/ible	debatable, sensible
-ing	interesting, amusing
-ed	disputed, concerned

TABLE 6: ADJECTIVAL DERIVATIONAL ENDINGS

Exercise

1. Extend the list of adjectival derivational endings. If you are in doubt about an ending consult a good desk dictionary or a reference grammar.

 2. Which of the italicized words in the sentences below are adjectives? Justify your answers solely by Tests 7a, 7b, and 8.
 - a. Your tie is *outlandish*.
 - b. I have no *particular* doubts about your proposal.
 - c. The chamber contains more *particular* matter than that one.
 - d. Zubin is quite *unstable*.
 - e. *Some* dogs are mean.

 3. The last two derivational suffixes in Table 6 are superficially identical to verb forms in the present participle (Ving) and the regular forms of the past tense (Ved) and past participle (Ven). Think of example sentences that the adjectives appear in; think of sentences in which the verb forms appear. How can you differentiate the two? (We have noted that there is an ongoing historical process through which participles shift to adjectives. The process apparently occurs word by word. Can you identify any other verbs that are currently in the course of becoming adjectives?)

 4. In a dictionary, look up the meanings and other grammatical characteristics of the adjective-creating suffixes in Table 6.
-
-

The tests we have provided eliminate from the list of adjectives many sorts of words that have been traditionally included with this class, to the confusion of many people. For instance, cardinal numerals such as *five* and ordinal numerals such as *fifth* cannot be called adjectives, since we do not say **fiver* or **fivest* or **fifther* or **fifthest*. Similarly we exclude (a) the articles *the* and *a/an*; (b) the demonstratives *this*, *that*, *these*, and *those*; (c) indefinites, including quantifiers such as *all*, *no*, *every*; (d) possessive pronouns such as *my*, *your*, *their*; and (e) interrogative pronouns such as *what* and *which*. All of these forms regularly modify nouns. None of them are adjectives.

To Tests 7 and 8, we can add one further formal feature of adjectives, their position in a sentence. Adjectives occur in a very limited set of positions. The two most common are (a) between a determiner (an article or article-like word) and a noun, and (b) after a linking verb (i.e., of the *be-become-seem*

type). We will discuss the words that function as determiners in our chapter on Minor Parts of Speech. Briefly, this class includes words such as *alan*, *the*, *this*, *that*, *some*, *every*, and *many*. Thus the italicized words in sentences (6a-c) are adjectives:

- (6) a. The *recent* discovery of HG 116 . . .
- b. This *remarkable* discovery . . .
- c. Some *unnerving* developments . . .

Examples of adjectives that appear after *be-become-seem* verbs are:

- (7) a. I am *steadfast*.
- b. She grew *stubborn*.
- c. He appears *pig-headed*.

Using these patterns we can create another analytic test for adjectives:

ANALYTIC TEST 9: *A word may be an adjective if it can occur (a) between a determiner and a noun, or (b) after verbs of the be-become-seem class.*

These tendencies are not as strong as the earlier analytic tests that we proposed, since non-adjectives can appear in both positions; however, they may support the tests in doubtful cases.

Exercise

Create two test frames for adjectives based on Analytic Test 9, and apply them to *prominent*, *certain*, *seasonal*, *different*, and *next* to show that they may be adjectives.

As we mentioned earlier, adjectives and adverbs may occur after words such as *very*, *rather*, and *quite*:

- (8) a. Very tired
- b. Quite bored
- c. Rather inflexible

ANALYTIC TEST 10: *A word may be an adjective if it can be modified by very, quite, or rather.*

Exercise

Create a test frame based on Analytic test 10 and apply it to *book*, *desperate*, *print*, *readable*, *squishy*, and *depend* to determine which may be adjectives.

We must make a rather important distinction here between gradable and non-gradable adjectives. Gradable adjectives are those that can be inflected for comparative and superlative and modified by *more*, *most*, *very*, *somewhat*, and similar words. Thus *smart* is a gradable adjective: *smarter*, *smartest*, *very smart*. Most of the adjectives we've discussed in this section are gradable. *Total*, on the other hand, is non-gradable: **She's a totaler/very total freak*. Other non-gradable adjectives include *absolute*, *atomic*, *electronic*, *entire*, *single*, as you can demonstrate for yourself by trying to inflect or modify them. Non-gradable adjectives may over time become gradable, and this process may cause usage controversy, as the recent history of *unique* shows. For more on this word, we suggest that you check *unique* in a dictionary, preferably one such as the American Heritage, which includes thoughtful usage notes.

Our final test for adjectivehood relies on the fact that only adjectives can occur in the frame [as ___ as a(n) X], where X is an appropriate noun. For example, in *as fearless as a lion*, *fearless* is in the test position and *lion* is a noun filling the X position. Because the expression is grammatical we can infer that *fearless* may be an adjective.

Exercise

Apply the test frame [as ___ as a(n) X], with appropriate nouns in place of X, to the following words to determine which are adjectives: *reasonable*, *round*, *table*, *give*, *quickly*, *homeward*, *reddish*.

Functions of adjectives

While adjectives often appear to directly modify nouns, in fact they primarily function as **heads of adjective phrases (AP)**, which we discuss in our chapter on Phrases.

Subclasses of adjectives

Traditional grammarians employ a set of distinctions that we will not adopt because some of the subcategories are based on a confusion of form and function. However, for purposes of completeness, we list these distinctions here,

but treat the forms elsewhere. **Descriptive adjectives** are those adjectives that satisfy Analytic Tests 7, 8, and 9. Like nouns, this group is sometimes subdivided into **common** (e.g., *honest, alive*) and **proper** (e.g., *Atlantic, Indian*). Proper descriptive adjectives are typically derived from proper nouns and many do not allow comparison, though they regularly end in derivational suffixes typical of adjectives.

Aside from descriptive adjectives, traditional grammars recognize as adjectives other forms which are not formally adjectives but may modify nouns. Throughout this section, we have tried to justify their exclusion from the adjective category. Table 7 identifies some of these subclasses, each of which confuses a word's part of speech with its function.

Noun as Adjective	Easter bonnet
Pronoun as Adjective	This situation
Adverb as Adjective	Far South
Possessive Adjective	Someone's lunchbox
Demonstrative Adjective	Such effrontery
Interrogative Adjective	Whose signature is this?
Relative Adjective	The person whom I will help
Numeral Adjectives	Five guesses
Article as Adjective	The truth
Phrase as Adjective	Members in good standing
Clause as Adjective	Anyone who desires an education

TABLE 7: TRADITIONAL SUBCLASSES OF ADJECTIVES

The attempt to classify such a disparate group of structures as adjectives destroys the possibility of any consistent system of parts of speech. In our approach, none of the above categories exist. Instead, we would call the members of Table 7 “noun as modifier,” “pronoun as modifier,” “article as modifier,” “phrase as modifier,” etc.

Adverbs

The traditional definition of adverb is “a word used to modify a verb, an adjective, or another adverb.” This definition is clearly functional and actually represents the typical functions of adverbs (or at least, adverb phrases) fairly well, e.g., *Run **quickly**, **extremely** adroit, **remarkably** cleverly.*

Exercise

To what extent do the italicized adverbs below conform to the traditional definition?

- a. Atwood writes *clearly*.
 - b. *Clearly*, Atwood wrote the letter.
 - c. This sample is *obviously* atypical.
 - d. *Obviously*, this sample is atypical.
 - e. Belinda smiled *hopefully*.
 - f. *Hopefully*, Belinda will bring some refreshments.
-
-

The definition above omits an important function of adverbs, namely, modifying a complete sentence, as in b, d, and f in the exercise just above, and in (9):

- (9) *Frankly*, I don't like calamari.

Here the adverb *frankly* indicates that the speaker feels he or she is being candid in uttering the sentence.

And as we have now grown to expect from functional definitions, the traditional definition of adverb will predict false positives, i.e., predict that certain words or expressions are adverbs when they are not. For instance, compare *cautiously* with *with caution* in *The officer approached the motorist cautiously/with caution*. Both expressions function identically—both tell us the manner in which the officer approached the motorist, i.e., both modify the verb *approached*. However, while *cautiously* is definitely an adverb, *with caution* is just as definitely a prepositional phrase. We will formally distinguish true adverbs from other phrases that can fulfill some of the same functions as adverbs, but we will refer to all expressions that function like adverbs with the cover-term **adverbial**.

Our approach, as usual, will be to begin with a formal characterization of adverbs. We will then return for a brief review of the functional division of adverbs according to what they modify—sentences, verbs/verb phrases, adjectives, and adverbs. Finally, we will indicate some of the traditional semantic categories of adverbs.

Formal characteristics of adverbs

Many adverbs cannot be inflected, but those that can are indistinguishable in that respect from adjectives. Hence we can minimally adapt the formal criteria we used for adjectives in 7a and 7b to apply to adverbs:

ANALYTIC TEST 11a. *A word may be an adverb if it can be made comparative and/or superlative by the addition of the suffixes {-er} and {-est}. (Applies to short words.)*

ANALYTIC TEST 11b. *A word may be an adverb if it can be made comparative and/or superlative by being modified by **more** and **most**. (Applies to longer words.)*

ANALYTIC TEST 11c. *A word may be an adverb if it can be modified by intensifiers such as very, quite, or rather.*

Test 11a, in fact, rarely applies, since the language contains relatively few one-syllable adverbs. *Hard* and *fast* are examples. One such form, *well*, has irregular comparative and superlative forms, *better* and *best*. Colloquially, words such as *quick*, *soft*, *slow* are inflected for the comparative:

(10) She threw it *quicker/softer/slower* than anyone expected.

Such usages, though, are usually regarded as prescriptively incorrect, the forms *more quickly*, etc., being preferred. In general, Test 11b serves as the norm of prescriptively acceptable comparison of adverbs:

- (11) a. She threw it *more quickly/softly/slowly/cautiously* than anyone expected.
b. That is *most often* the case.

Exercise

Apply Tests 11a, b, and c to the following words to show that they may all be adverbs: *far*, *long*, *often*, *soon*.

Derivational tests also apply to adverbs, though there are only a few adverbial suffixes:

ANALYTIC TEST 12. *A word may be an adverb if it actually ends in an adverbial derivational suffix.*

Some typical adverbial suffixes are listed in Table 8.

-ly	quickly, frequently, awkwardly, cautiously (when {-ly} is added to adjectives)
-wise	lengthwise, otherwise
-ward	homeward

TABLE 8: ADVERBIAL DERIVATIONAL ENDINGS

Exercise

Use the derivational endings listed in Table 8 to show that the following words may all be adverbs: *fondly*, *gradually*, *northward*, *onward*, *recently*, *colorwise*, *edgewise*.

Because there are so few adverb-creating suffixes, it might seem difficult to distinguish between adjectives and adverbs. In practice, however, it is usually fairly simple to tell them apart because of their positions in sentences.

ANALYTIC TEST 13a. *Adverbs do not occur in the positions typically occupied by adjectives.*

ANALYTIC TEST 13b. *Adverbs tend to be relatively movable in a sentence.*

Let us use the adjective *frequent* and its related adverb *frequently* as examples of these criteria. As we have seen, adjectives can occur between determiners and nouns or after *be-become-seem* verbs, as in (12a) and (12b):

- (12) a. Harriet was a frequent visitor.
 b. Harriet's visits were frequent.

Adverbs in these positions are ungrammatical:

- (13) a. *Harriet was a frequently visitor.
 b. *Harriet's visits were frequently.

The sentences below show the results of applying Test 13b to the adjective *frequent* and the adverb *frequently*:

- (14) a. Harriet was a frequent visitor.

- b.*Frequent, Harriet was a visitor
- c.*Harriet was frequent a visitor.
- d.*Harriet was a visitor frequent.
- e. Frequently, Harriet was a visitor.
- f. Harriet was frequently a visitor.
- g. Harriet was a visitor frequently.

The portability of adverbs in sentences is not random; they tend to occur in three positions: (a) at the beginning of a sentence; (b) at the end of a sentence; and (c) in the sequence of auxiliary verbs, especially after the first. Due to restrictions on particular adverbs, not all will occur in all three positions:

- (15) a. I will *never* leave you.
b.**Never* I will leave you.
c. *Never* will I leave you.
d.*I will leave you *never*.

Exercise

Using Tests 13a and 13b, determine which of the following words may be adverbs: *academically*, *budgetwise*, *ever*, *friendly*, *portly*, *recently*, *reluctantly*, *southward*, *friendly*, *still*, *ungodly*, *unholy*, *worldly*. Confirm your results by applying Tests 11 and 12.

Functions of adverbs

Adverbs serve as **heads of adverb phrases (AdvP)**. Like adjectives, however, they accept only a few preceding modifiers (mainly *more/most*, *very*, and *quite*) and a limited range of following prepositional phrases (bolded) (e.g., *more rapidly **than a speeding locomotive***). Again, since most adverbs are unmodified, many grammarians include among their functions those that properly apply to AdvPs. We will have more to say about adverb phrases in our chapter on Phrases.

As we noted, adverbs and adverb phrases modify sentences, verbs/verb phrases, adjectives and adverbs. We briefly discuss and illustrate these functions.

Sentence modifiers have two major functions. They can indicate a speaker's evaluation of the truth of the sentence, as in (16a), or the speaker's feelings about the situation represented by the sentence, as in (16b) and (16c).

- (16) a. *Clearly/apparently/obviously*, Wonkers is a schizo.
- b. *Frankly/honestly*, my dear, we don't want a dam.
- c. *Luckily/fortunately*, I regained control of the car.

Sentence modifiers also connect one clause or part of a clause with another, as in (17a)-(17c).

- (17) a. The paramedics arrived and *eventually* Oscar was stabilized.
- b. Summer arrived; *however*, the weather remained poor.
- c. He gambled away his inheritance, and *consequently* had to work for a living.

The class of expressions referred to as “transition devices” by composition teachers includes such connective adverbs.

The following examples illustrate adverbs (bolded) modifying verbs/verb phrases (18a,b), adjectives (19a,b), and adverbs (20a,b) (italicized):

- (18) a. He *waved* **frantically**.
- b. She **coolly** *aimed the pistol*.
- (19) a. It's a **wonderfully** *wicked* play.
- b. It was **hideously** *deformed*.
- (20) a. They approached **extremely** *hesitantly*.
- b. He reacted **remarkably** *angrily*.

Exercise

Prescriptive grammarians often object to the use of *hopefully* as a sentence modifier, as in *Hopefully, my paycheck will arrive soon*. Check the usage labels on this word in a current dictionary. Does your dictionary mention this use of *hopefully*? If so, is it mentioned disapprovingly? What (if any) reasons support the disapproval of this word? What does the word mean? Is it an adverb or some other part of speech? What kind of adverb is it? Does it differ grammatically or semantically from other adverbs in its class?

Semantic subcategories of adverbs

Adverbs are often classified semantically in terms of Time, Place, Manner, Frequency, and Degree. Table 9 illustrates these categories.

MEANING	EXAMPLES
Time	today, yesterday, now, then
Place	here, there
Direction	northward
Manner	well, slowly, convincingly, quietly
Frequency	often, regularly
Degree	completely, thoroughly, absolutely

TABLE 9: SEMANTIC CLASSES OF ADVERBS

These categories are worth remembering, since most of them also apply to prepositions, which will be considered in our chapter on Minor Parts of Speech. In addition, some of these adverbs (e.g., *then*, *there*) serve as substitutes for prepositional phrases.

Our analysis eliminates the traditional categorization of words such as *very* and *quite* as adverbs, though the examples below show that they can modify adjective and adverbs:

- (21) a. *very* old
 b. *quite* frequently
 c. *only* occasionally

Traditionally, these words are often lumped together with **degree adverbs**. We have already classified these words as **intensifiers**.

Exercise

Apply Analytic Tests 12-13 to demonstrate that the italicized words in (21) are not adverbs.

REFERENCES AND RESOURCES

- Bauer, Laurie. 1983. *English Word-formation*. London, UK: Cambridge University Press.
- _____. 1988. *Introducing Linguistic Morphology*. Edinburgh, UK: Edinburgh University Press.
- Biber, Douglas, Stig Johansson, Geoffrey Leech, Susan Conrad, and Edward Finegan. 1999. *Longman Grammar of Spoken and Written English*. Harlow, UK: Longman.
- Celce-Murcia, Marianne, and Diane Larsen-Freeman. 1999. *The Grammar*

- Book: An ESL/EFL Teacher's Course.* (2nd ed.) Rowley, MA: Newbury House Publishers, Inc.
- Cruse, Alan. 2004. *Meaning in Language.* Oxford, UK: Oxford University Press.
- Frawley, William. 1992 *Linguistic Semantics.* Hillsdale, NJ: Lawrence Erlbaum Associates.
- Gee, James Paul. 1996. *Social Linguistics and Literacies: Ideology in Discourses.* (2nd ed.). London, UK: Taylor and Francis.
- Gregory, Howard. 2000. *Semantics.* London, UK: Routledge.
- Hudleston, Rodney and Geoffrey Pullum. 2002. *Cambridge Grammar of the English Language.* Cambridge, UK: Cambridge University Press.
- McBeth, Mark. 2001. In C.G. Panetta (ed.) *Contrastive Rhetoric Revisited and Redefined.* Mahwah, NJ: LEA.
- Noguchi, R. 1991. *Grammar and the Teaching of Writing: Limits and Possibilities.* Urbana-Champaign: NCTE.
- Pinker, S. 1999. *Words and Rules.* New York: Basic Books.
- Quirk, Randolph, Sidney Greenbaum, Geoffrey Leech, and Jan Svartik. 1972. *A Grammar of Contemporary English.* London, UK: Longman.
- Quirk, Randolph, and Sidney Greenbaum. 1973. *A Concise Grammar of Contemporary English.* New York: Harcourt Brace Jovanovich, Inc.
- Radford, Andrew. 1988. *Transformational Grammar.* Cambridge, UK: Cambridge University Press.
- Weaver, Constance. 1996. *Teaching Grammar in Context.* Portsmouth, NH: Boynton/Cook Heinemann.

GLOSSARY

ABSTRACT NOUN: noun that denotes entities apprehended by the mind, e.g., *truth, belief.* See **CONCRETE NOUN.**

ADJECTIVE PHRASE: a phrase with an adjective as its head.

ADJUNCT: modifier within a verb phrase.

ADVERBL PHRASE: a phrase with an adverb as its head.

ATTRIBUTIVE ADJECTIVE: function of an adjective (phrase) that precedes (or occasionally follows) its head noun. See **PREDICATE ADJECTIVE.**

CATEGORY CHANGE: See **CONVERSION.**

COLLECTIVE NOUN: a noun that denotes a group of individuals (*army, jury, the public, The United States*).

COMMON NOUN: a noun that refers to classes rather than to specific individuals, e.g., *tissue, box, xylophone.* See **PROPER NOUN.**

COMPARATIVE: degree of an adjective or adverb, signaled by *-er* or *more.*

COMPLEMENT: expression that completes a construction. See **OBJECT COMPLE-**

MENT, SUBJECT COMPLEMENT.

CONCRETE NOUN: noun that denotes an entity that can be apprehended by any one of the five senses, e.g., *sneeze, floor, paper*. See **ABSTRACT NOUN**.

CONTENT WORD: words (nouns, verbs, adjectives, and adverbs) that express the major information of a sentence. See **FUNCTION WORD**.

CONVERSION: change of part of speech without change of form.

COUNT NOUN: a noun that represents entities that can be individuated and counted, and hence can be made plural, e.g., *typewriter, diskette, page*. See **NON-COUNT NOUN**.

DEGREE ADVERB: adverb indicating the extent to which an adjective or adverb applies. See **INTENSIFIER**.

DESCRIPTIVE ADJECTIVE: any adjective that meets the formal requirements for adjectives.

FUNCTION WORD (also called **STRUCTURE WORD**): words representing grammatical information. See **CONTENT WORD**.

FUNCTIONAL SHIFT: See **CONVERSION**.

GERUND: in traditional grammar, a verb phrase that functions as a subject or object.

HEAD: main word of a phrase.

INFINITIVE: (a) a form of a verb without any inflection—i.e., the form that one would look up in a dictionary, e.g., *eat*. Abbreviated as V. (b) the same form of a verb when preceded by *to*, e.g., *to eat*.

INTENSIFIER: words such as *very* and *quite* that modify adjectives and adverbs.

INTRANSITIVE VERB: a verb that does not accept a **DIRECT OBJECT**.

LINKING VERB: a verb that is followed by a **SUBJECT COMPLEMENT**.

MAIN VERB: head of a verb phrase or predicate.

MODIFIER: optional expression that qualifies or restricts the denotation of another expression.

NOMINALIZATION: the process by which a word (or group of words) becomes a noun (or noun phrase), often through the addition of a derivational suffix.

NON-COUNT NOUN (also called **mass**): a noun thought of as representing things in the world as undifferentiated masses, whose parts are not identified as discrete individuals (*rice, sugar, milk*). See **COUNT NOUN**.

OBJECT COMPLEMENT: expression that complements a direct object. See **SUBJECT COMPLEMENT**.

PARTICIPLE: the Ving or Ven inflectional form of a verb; in traditional grammar, a verb form that modifies a noun.

PAST PARTICIPLE: the Ven inflectional form of a verb.

POSITIVE: degree of adjective or adverb that is not compared. See **COMPARATIVE** and **SUPERLATIVE**.

PREDICATE ADJECTIVE: adjective (phrase) that appears after the verbs *be*, *become*, *seem*, etc. See **SUBJECT COMPLEMENT**.

PRESENT PARTICIPLE: the Ving inflectional form of a verb.

PRINCIPAL PARTS: a list of the infinitive and inflectional forms of a verb: V, Vs, Ving, Ved, and Ven.

PRODUCTIVITY: the degree of freedom with which a linguistic process, e.g., nominalization, applies to items in its range.

PROGRESSIVE: aspect indicated by *be* + Ving.

PROPER NOUN: a noun that refers to individual entities rather than to classes of entities, e.g., *Thomas Jefferson*, *Denver*, *the Koran*. See **COMMON NOUN**.

SENTENCE MODIFIER: a function of adverbials to describe such things as the speaker's manner of presenting information in a sentence, or the speaker's judgment about the truth of the sentence.

STEM: form of word to which affixes may be attached.

STRUCTURE WORD: See **FUNCTION WORD**.

SUBJECT COMPLEMENT: function of an adjective phrase or noun phrase after verbs such as *be*, *become*, and *seem*.

SUPERLATIVE: degree of an adjective or adverb, signaled by *-est* or *most*.

TRANSITIVE VERB: a verb that requires a direct object.

ZERO DERIVATION: See **CONVERSION**.

APPENDIX TO MAJOR PARTS OF SPEECH

Prototypes

Perhaps the greatest frustration for students—and teachers—of grammar is the discovery that seemingly clear and airtight definitions and tests fail to work smoothly in all cases. We argued in our chapter on Major Parts of Speech that one source of this difficulty is the faulty status of definitions, for instance, those that determine parts of speech on the basis of their meanings or functions. Our system augments such definitions with a set of *formal conditions* pertaining to morphological (inflectional and derivational) and syntactic (positional) characteristics of words. As some of our exercises demonstrate, not all conditions will apply in all cases. For instance, the condition that nouns can be made plural might seem to exclude many words that are clearly nouns by other criteria, e.g., *cattle* and *furniture*. On the other hand, these words can accept the genitive, as in *the cattle's thirst* and *the furniture's delivery*. Additionally, the {-ure} morpheme on *furniture* is typical to nouns: *armature*, *ligature*, *caricature*, and *signature*, though other words besides nouns may appear to end in the {-ure} morpheme: *mature* (adjective or verb), and *insure* (verb). In other words, we seem to find cases where our

conditions (a) fail to apply to all members of a parts-of-speech class, and (b) seem to apply to words outside the class that the conditions are chosen to identify.

Two natural reactions to this situation are possible. One response would simply be to ignore the anomalies and present the conditions as absolutes. This approach requires that conditions be both **necessary** and **sufficient**. (Conditions are necessary if they **all** have to apply; they are sufficient if no other conditions are needed.) This approach has the serious disadvantage of colliding head-on with reality.

A second response would give up the entire enterprise of defining parts of speech as too haphazard to be worth doing. But if we adopt this course of action, we will never learn anything about language and our students will wrongly assume that it is utterly chaotic.

As you might suspect, we view both of these extreme positions as fundamentally wrong—wrong about the nature of language and wrong about the way in which language should be studied. Let us now examine why.

Let's begin with two exercises (or party games, if you prefer). First, ask a group of your friends to make a list of ten birds. If you tally your lists of birds, you will find that certain names appear early on many lists (e.g., *eagle*, *robin*, *sparrow*) while others appear later (e.g., *owl*, *crow*). Also, some names will appear on almost all lists while others (e.g., *chicken*, *penguin*, *ostrich*) will appear less frequently or not at all.

The next step is to ask your subjects **why** they made their choices. They will probably say that birds have feathers, lay eggs, and are able to fly. And in the clearest cases, all these conditions apply. However, in less clear cases, some but not all of the conditions apply or the conditions conflict. For example, robins have feathers, fly, and lay eggs, while chickens typically do not fly, or at least do not fly very far; penguins and ostriches do not fly at all.

While our experiment tells us about how we categorize actual birds, it also tells us about how we use the word *bird*. When we use an expression like *bird*, we group together objects not so much on the basis of a rigid set of characteristics, but on a set of criteria or conditions that we use flexibly. In this way we group together objects on the basis of what the philosopher Ludwig Wittgenstein called “family resemblances.” You might envision, then, a target, with some objects close to the bull’s eye—those entities that are clearly birds. Those entities that fall closest to the center of the target are called **prototypes**. They possess all of the features typical of the category. Toward the periphery of the target lie entities that are less “birdy,” according to how many of the conditions they meet. In language, also, the boundaries between classes of words may be fuzzy. That is, just as we may occasionally

have trouble deciding whether to call a particular creature a bird (e.g., is archaeopteryx a bird?), we may also have difficulty deciding whether a word is a noun or an adjective (e.g., *poor*). See figure 5.1 in Aitchison (2003: 56).

Of course, not all conditions are of equal importance. Some are **essential**; their lack disqualifies something as being an instance of a category. For instance, a bird must lay eggs rather than produce live young. At the other extreme, some conditions are **excluded**; they must **not** be present. A bird cannot have four legs. Between these extremes lie other conditions. **Expected** conditions are associated with normal or typical characteristics, such as flight for birds. Creatures that lack an expected feature—e.g., penguins, which cannot fly—may serve to make the object an atypical or defective member of its class, without disqualifying it from membership altogether. Some conditions are merely **possible**; they result from common associations of the object. For example, birds commonly eat worms. Yet one would hardly be surprised at a bird that ate only seeds. Finally, certain conditions are **unlikely**, though not strictly impossible. A 1000-pound animal that met all the essential bird criteria might strain the imagination, but we would probably be willing to categorize it as a bird (Cruse, 1986).

We thus seem to identify objects on the basis of their resemblance to certain prototypes—an object which we consider the most typical member of the category. In other words, prototypes share all of the necessary and expected conditions, perhaps some of the possible ones, and none of the excluded or unlikely ones.

How does the notion of prototypes relate to grammar? Well, labels such as “noun” and “verb” have much the same status as “bird.” We can state a set of conditions—inflectional, derivational, and syntactic—that allow us to classify words in a relatively consistent and logical fashion. However, cases arise when not all of the conditions apply. That is, certain nouns may be less “nouny” than others. Nevertheless, nouns demonstrate a family resemblance to one another because they share many characteristics. Of course, you can expect to encounter words that cause difficulties, since the borders of the noun category are fuzzy. For instance, consider the following words that end in *-ing*: *interesting*, *meeting*, *sing*, *singing*. Let us consider the condition of taking the plural morpheme, along with the related feature of appearing in the noun slot *two* _____. We can thus immediately eliminate *interesting* (**two interestings*) and perhaps *sing* (*?two sings*), unless we are Native Americans. We can immediately qualify *meeting* as a noun (*two meetings*). *Singing* raises some problems: is *two singings* grammatical? Speakers will vary in how they answer this question, indicating that the expression lies on the border of the noun category. Note, however, that the variation has no impact on the force of the conditions. Even

someone who accepts the phrase as grammatical will readily agree that it is not a typical use of the word *singing*. Thus we might conclude that the capacity to be made plural is an expected—though not essential—condition for nouns.

You might object that the notion of prototypes leads to linguistic anarchy. Perhaps there are no essential conditions. Moreover, if standards are flexible, aren't we in danger of measuring with a rubber ruler? This reaction, however initially reasonable, has no real justification. In fact, our position allows the maintenance of analytic standards without reducing grammar either to legalistic rigidity or anarchic mush.

For one thing, English itself is grammatically flexible. The prevalence of conversion from one part of speech to another with no formal change provides one clear example. English allows almost any word to be converted to another part of speech, at least in restricted contexts, as the following suggest:

- (1) a. *Ifs, ands, or buts* (Subordinating and coordinating conjunctions to nouns)
- b. *Whys and wherefores* (Interrogatives to nouns)
- c. *But me no buts.* (Coordinator to verb and noun)

What we see here are instances of **linguistic creativity**, the ability to make infinite use of finite linguistic resources, which as we've seen, is characteristic of all languages. Clearly, the concepts we use to describe language should be able to account for the linguistic characteristics we actually observe. Categories arranged around prototypes and which allow fuzzy boundaries allow us to do this. Such categories do not require that we abandon our standards of linguistic usage; rather, they should encourage us to study and understand the language as it is used, not merely judge it on the basis of simplistic *a priori* assumptions.

Lest this sound too abstract, let's consider some practical consequences of the fact that not all criteria apply to every word in a class. One consequence is that we must accept that all major classes of words consist of subclasses of those words, e.g., those nouns that cannot be made plural (e.g., *information, independence*). Some of the nouns that cannot be made plural constitute the subclass of non-count (mass) nouns, though there are many other subclasses of nouns, of which we've seen a few. Teachers should be knowledgeable about the most important subclasses of words and their linguistic properties, e.g., count and non-count nouns, transitive and intransitive verbs, and so on, and be able to accurately present them to their students, especially to those students whose first language is not English.

A second consequence of prototypes is that they allow us to see similarities between classes of words. For instance, they encourage us to ask questions such as how is a noun like a verb? This question may seem like a riddle, but if we consider the two subclasses of verbs—transitive and intransitive—on the formal basis that the former but not the latter may take an object, as in (2a,b):

- (2) a. The Broncos defeated the Jets.
 b. The rabbit disappeared.

In (2a), *defeat* is inflected for past tense and so is clearly a verb, and because it is followed by the direct object (*the Jets*) it is transitive. In (2b), *disappeared* is likewise a verb, but it is intransitive since it cannot be followed by a direct object, as (3a,b) show:

- (3) a. *The rabbit disappeared itself. (i.e, made itself disappear.)
 b. *The magician disappeared the rabbit.

Corresponding to the verbs in (2), are nouns that resemble them:

- (4) a. The Broncos' defeat of the Jets.
 b. The rabbit's disappearance.

Note that example (4a) contains the noun *defeat* (it can be made plural), which has been converted from a verb and which is modified by the genitive phrase *The Broncos'*, which corresponds to the subject of the verb *defeat* in (2a), while the prepositional phrase *of the Jets* corresponds to the direct object *the Jets* in (2a). Likewise, the derived noun *disappearance* in (4b) corresponds to the verb *disappear* in (2b). However, just as the verb *disappear* cannot accept an object, the noun *disappearance* cannot take an *of*-phrase complement corresponding to a direct object, as shown by the ungrammaticality of (5a,b). (Compare to (3a,b).)

- (5) a. *The rabbit's disappearance of itself.
 b. *The magician's disappearance of the rabbit.

In other words, certain nouns have restrictions that closely parallel those of transitivity on verbs.

The facts of English grammar thus suggest that the rigid separation of parts of speech conceals a potentially rich network of similarities among

categories, similarities that might prove interesting for teachers of writing. A prototype approach encourages one to explore, rather than ignore, possible connections between categories.

REFERENCES AND RESOURCES FOR APPENDIX

- Aitchison, J. 2003. *Words in the Mind*. (3rd ed.) Oxford, UK: Blackwell.
- Cruse, A. 1986. *Lexical Semantics*. Cambridge, UK: Cambridge University Press.
- Labov, W. 1973. The boundaries of words and their meanings. In C.-J. N. Bailey and R.W. Shuy, (eds). *New Ways of Analyzing Variation*. Washington, DC: Georgetown University Press.