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An Introduction to Language

SEVENTH EDITION

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**An Introduction to Language,
Seventh Edition**

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CHAPTER

Language Change: The Syllables of Time

No language as depending on arbitrary use and custom can ever be permanently the same, but will always be in a mutable and fluctuating state; and what is deem'd polite and elegant in one age, may be accounted uncouth and barbarous in another.

Benjamin Martin, Lexicographer



All living languages change with time. It is fortunate that they do so rather slowly compared to the human life span. It would be inconvenient to have to relearn our native language every twenty years. Stargazers find a similar situation. Because of the movement of individual stars, the constellations are continuously changing their shape. Fifty thousand years from now we would hardly recognize Orion or the Big Dipper, but from season to season the changes are imperceptible. Linguistic change is also slow, in human — if not astronomical — terms. As years pass we hardly notice any change. Yet if we were to turn on a radio and miraculously receive a broadcast in our “native language” from the year 3000, we would probably think we had tuned in a foreign language station. Many language changes are revealed in written records. We know a great deal of the history of English because it has been written for about 1,000 years. Old English, spoken in England around the end of the first millennium, is scarcely recognizable as English. (Of course, our linguistic ancestors did not call their language Old English!) A speaker of Modern English would find the language unintelligible. There are college courses in which Old English is studied as a foreign language.

A line from *Beowulf* illustrates why Old English must be translated.¹

Wolde guman findan þone þe him on sweofote sare geteode.
He wanted to find the man who harmed him while he slept.

Approximately five hundred years after *Beowulf*, Chaucer wrote *The Canterbury Tales* in what is now called Middle English, spoken from around 1100 to 1500. It is more easily understood by present-day readers, as seen by looking at the opening of the *Tales*.

Whan that Aprille with his shoures soote
The droght of March hath perced to the roote . . .
When April with its sweet showers
The drought of March has pierced to the root . . .

Two hundred years after Chaucer, in a language that can be considered an earlier form of Modern English, Shakespeare's *Hamlet* says:

A man may fish with the worm that hath eat of a king, and eat of the fish
that hath fed of that worm.

The stages of English are Old English (449–1100 C.E.), Middle English (1100–1500), and Modern English (1500–present). This division is somewhat arbitrary, being marked by dates of events in English history, such as the Norman Conquest of 1066, the results of which profoundly influenced the English language. Thus the history of English and the changes in the language reflect nonlinguistic history to some extent, as suggested by the following dates:

449 – 1066 Old English	449	Saxons invade Britain
	6 th century	Religious literature
	8 th century	<i>Beowulf</i>
	1066	Norman Conquest
1066 – 1500 Middle English	1387	<i>Canterbury Tales</i>
	1476	Caxton's printing press
	1500	Great Vowel Shift
1500 – Modern English	1564	Birth of Shakespeare

Changes in a language are changes in the grammars of those who speak the language, and are perpetuated when new generations of children learn the language by acquiring the altered grammar. This is true of sign languages as well as spoken languages. Like all living languages, American Sign Language continues to change. Not only have new signs entered the language over the past 200 years, but also the forms of the signs have changed in ways similar to the historical changes in spoken languages.

An examination of the past 1,500 years of English shows changes in the lexicon as well as to the phonological, morphological, syntactic, and semantic components of the

¹ The letter þ is called *thorn* and is pronounced [θ] in this example.

grammar. No part of the grammar remains the same over the course of history. Although most of the examples in this chapter are from English, the histories of all languages show similar changes.

The Regularity of Sound Change

That's not a regular rule: you invented it just now.

Lewis Carroll, *Alice's Adventures in Wonderland*

The southern United States represents a major dialect area of American English. For example, words pronounced with the diphthong [aj] in non-Southern English will usually be pronounced with the monophthong [a:] in the South. Local radio and TV announcers at the 1996 Olympics in Atlanta called athletes to the [ha:] "high" jump, and local natives invited visitors to try Georgia's famous pecan [pa:] "pie." The [aj]-[a:] correspondence of these two dialects is an example of a **regular sound correspondence**. When [aj] occurs in a word in non-Southern dialects, [a:] occurs in the Southern dialect, and *this is true for all such words*.

The different pronunciations of *I*, *my*, *high*, *pie*, and *such* did not always exist in English. This chapter will discuss how such dialect differences arose and why the sound differences are usually regular and not confined to just a few words.

Sound Correspondences

In Middle English a mouse [maws] was called a *mūs* [mu:s], and this *mūs* may have lived in someone's *hūs* [hu:s], the way *house* [haws] was pronounced at that time. In general, Middle English speakers pronounced [u:] where we now pronounce [aw]. This is a regular correspondence like the one between [aj] and [a:]. Thus *out* [awt] was pronounced [u:t], *south* [sawθ] was pronounced [su:θ], and so on. Many such regular correspondences show the relation of older and newer forms of English.

The regular sound correspondences we observe between older and modern forms of a language are due to phonological changes that affect certain sounds, or classes of sounds, rather than individual words. Centuries ago English underwent a phonological change called a **sound shift** in which [u:] became [aw].

Phonological changes can also account for dialect differences. At an earlier stage of American English a sound shift of [aj] to [a:] took place among certain speakers in the southern region of the United States. The change did not spread beyond the South because the region was somewhat isolated. Many dialect differences in pronunciation result from a sound shift whose spread is limited.

Regional dialect differences may also arise when innovative changes occur everywhere but in a particular region. The regional dialect may be conservative relative to other dialects. The pronunciation of *it* as *hit*, found in the Appalachian region of the United States, was standard in older forms of English. The dropping of the [h] was the innovation.

Ancestral Protolanguages

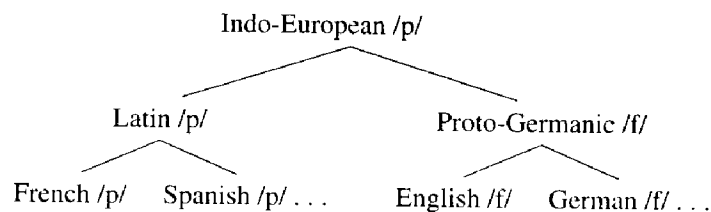
Many modern languages were first regional dialects that became widely spoken and highly differentiated, finally becoming separate languages. The Romance languages — French, Spanish, and so on — were once dialects of Latin spoken in the Roman Empire. There is nothing degenerate about regional pronunciations. They result from natural sound change that occurs wherever human language is spoken.

In a sense, the Romance languages are offspring of Latin, their metaphorical parent. Because of their common ancestry, the Romance languages are **genetically related**. Early forms of English and German, too, were once dialects of a common ancestor called **Proto-Germanic**. A **protolanguage** is the ancestral language from which related languages have developed. Both Latin and Proto-Germanic were themselves descendants of an older language called **Indo-European**.² Thus, Germanic languages such as English and German are genetically related to the Romance languages such as French and Spanish. All these important national languages were once regional dialects.

How do we know that the Germanic and Romance languages have a common ancestor? One clue is the large number of sound correspondences. If you have studied a Romance language such as French or Spanish, you may have noticed that where an English word begins with *f*, the corresponding word in a Romance language often begins with *p*, as shown in the following examples.

English /f/	French /p/	Spanish /p/
father	père	padre
fish	poisson	pescado

This /f/-/p/ correspondence is another example of a regular sound correspondence. There are many between the Germanic and Romance languages. The prevalence of such regular sound correspondences cannot be explained by chance. What then accounts for them? A reasonable guess is that a common ancestor language used a *p* in words for *fish*, *father*, and so on. We posit a /p/ rather than an /f/ since more languages show a /p/ in these words. At some point speakers of this language separated into two groups that lost contact. In one of the groups a sound change of *p* → *f* took place. The language spoken by this group eventually became the ancestor of the Germanic languages. This ancient sound change left its trace in the *f*-*p* sound correspondence that we observe today, as illustrated in the diagram.



² It may also be called Proto-Indo-European.

Phonological Change

Editors . . . for whom vowels did not matter and who cared not a jot for consonants.

Voitare

Regular sound correspondences illustrate changes in the phonological system. In earlier chapters we discussed speakers' knowledge of their phonological system, including knowledge of the phonemes and phonological rules of the language. Any of these aspects of the phonology is subject to change.

The velar fricative /x/ is no longer part of the phonemic inventory of most Modern English dialects. *Night* used to be pronounced [nixt] and *drought* was pronounced [druxt]. This phonological change — the loss of /x/ — took place between the times of Chaucer and Shakespeare. All words once pronounced with an /x/ no longer include this sound. In some cases it disappeared altogether, as in *night* and *light*. In other cases the /x/ became a /k/, as in *elk* (Old English *eolh* [eɔlx]). In yet other cases it disappeared to be replaced by a vowel, as in *hollow* (Old English *holh* [hɔlx]). Dialects of Modern English spoken in Scotland have retained the /x/ sound in some words, such as *loch* [lɔx] meaning “lake.”

These examples show that the inventory of sounds can change by the loss of phonemes. The inventory can also change through the addition of phonemes. Old English did not have the phoneme /ʒ/ of *leisure* [liʒər]. Through a process of palatalization — a change in place of articulation to the palatal region — certain occurrences of /z/ were pronounced [ʒ]. Eventually the [ʒ] sound became a phoneme in its own right, reinforced by the fact that it occurs in French words familiar to many English speakers such as *azure* [æʒər].

An allophone of a phoneme may, through sound change, become a phoneme in its own right. Old English lacked a /v/ phoneme. The phoneme /f/, however, had the allophone [v] when it occurred between vowels. Thus *ofer* /ofer/ meaning “over” was pronounced [ɔvər] in Old English.

Old English also had a geminate phoneme /f:/ that contrasted with /f/, and was pronounced as a long [f:] between vowels. The name *Offa* /of:a/ was pronounced [ɔf:a]. A sound change occurred in which the pronunciation of /f:/ was simplified to [f]. Now /f:/ was pronounced [f] between vowels so it contrasted with [v]. This made it possible for English to have minimal pairs involving [f] and [v]. Speakers therefore perceived the two sounds as separate phonemes, in effect, creating a new phoneme /v/.

Similar changes occur in the history of all languages. Neither /ç/ nor /ʒ/ were phonemes of Latin, but /ç/ is a phoneme of modern Italian and /ʒ/ a phoneme of modern French, both of which evolved from Latin. In American Sign Language many signs that were originally formed at the waist or chest level are now produced at a higher level near the neck or upper chest, a reflection of changes in the “phonology.”

Phonemes thus may be lost (/x/), or added (/ʒ/), or result from a change in the status of allophones (the [v] allophone of /f/ becoming /v/).

Phonological Rules

An interaction of phonological rules may result in changes in the lexicon. The nouns *house* and *bath* were once differentiated from the verbs *house* and *bathe* by the fact that

the verbs ended with a short vowel sound. Furthermore, the same rule that realized /f/ as [v] between vowels, also realized /s/ and /θ/ as the allophones [z] and [ð] between vowels. This was a general rule that voiced intervocalic fricatives. Thus the /s/ in the verb *house*, was pronounced [z], and the /θ/ in the verb *bathe* was pronounced [ð].

Later a rule was added to the grammar of English deleting unstressed short vowels at the end of words. A contrast between the voiced and voiceless fricatives resulted, and the new phonemes /z/ and /ð/ were added to the phonemic inventory. The verbs *house* and *bathe* were now represented in the mental lexicon with final voiced consonants.

Eventually, both the unstressed vowel deletion rule and the intervocalic-voicing rule were lost from the grammar of English. The set of phonological rules can change both by addition and loss of rules.

Changes in phonological rules can, and often do, result in dialect differences. In the previous chapter we discussed the addition of an *r*-dropping rule in English (/r/ is not pronounced unless followed by a vowel) that did not spread throughout the language. Today, we see the effect of that rule in the *r*-less pronunciation of British English and of American English dialects spoken in the Boston area and the southern United States.

From the standpoint of the language as a whole, phonological changes occur gradually over the course of many generations of speakers, although a given speaker's grammar may or may not reflect the change. The changes are not planned any more than we are presently planning what changes will take place in English by the year 2300. Speakers are aware of the changes only through dialect differences.

The Great Vowel Shift

A major change in English that resulted in new phonemic representations of words and morphemes took place approximately between 1400 and 1600. It is known as the **Great Vowel Shift**. The seven long, or tense, vowels of Middle English underwent the following change:

Shift		Example		
Middle English	Modern English	Middle English	Modern English	
[i:]	→ [aj]	[mi:s]	→ [majs]	<i>mice</i>
[u:]	→ [aw]	[mu:s]	→ [maws]	<i>mouse</i>
[e:]	→ [i:]	[ge:s]	→ [gi:s]	<i>geese</i>
[o:]	→ [u:]	[go:s]	→ [gu:s]	<i>goose</i>
[ɛ:]	→ [e:]	[brɛ:ken]	→ [bre:k]	<i>break</i>
[ɔ:]	→ [o:]	[brɔ:ken]	→ [bro:k]	<i>broke</i>
[a:]	→ [e:]	[na:mə]	→ [ne:m]	<i>name</i>

By diagramming the Great Vowel Shift on a vowel chart (Figure 11.1), we can see that the high vowels [i:] and [u:] became the diphthongs [aj] and [aw], while the long vowels underwent an increase in tongue height, as if to fill in the space vacated by the high vowels. In addition, [a:] was fronted to become [e:].

These changes are among the most dramatic examples of regular sound shift. The phonemic representation of many thousands of words changed. Today, some reflection

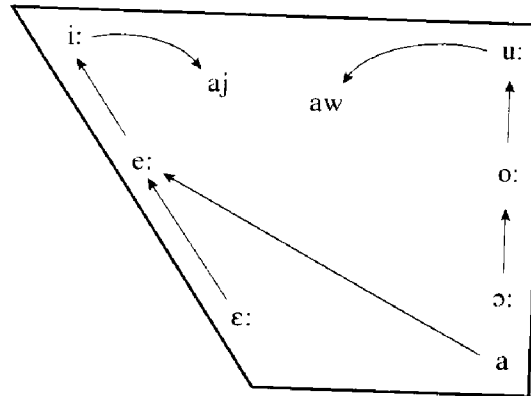


Figure 11.1 The Great Vowel Shift.

of this vowel shift is seen in the alternating forms of morphemes in English: *please* — *pleasant*; *serene* — *serenity*; *sane* — *sanity*; *crime* — *criminal*; *sign* — *signal*; and so on. Before the Great Vowel Shift, the vowels in each pair were the same. Then the vowels in the second word of each pair were shortened by the **Early Middle English Vowel Shortening** rule. As a result the Great Vowel Shift, which occurred later, affected only



The sniffles in 14th-century England

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the first word in each pair. The second word, with its short vowel, was unaffected. This is why the vowels in the morphologically related words are pronounced differently today, as shown in Table 11.1.

Table 11.1 Effect of the Vowel Shift on Modern English

Middle English Vowel	Shifted Vowel	Short Counterpart	Word with Shifted Vowel	Word with Short Vowel
ī	aj	i	divine	divinity
ū	aw	u	profound	profundity
ē	i	e	serene	serenity
ō	u	a	fool	folly
ā	e	æ	sane	sanity

The Great Vowel Shift is a primary source of many spelling inconsistencies of English because our spelling system still reflects the way words were pronounced before the Great Vowel Shift.

Morphological Change

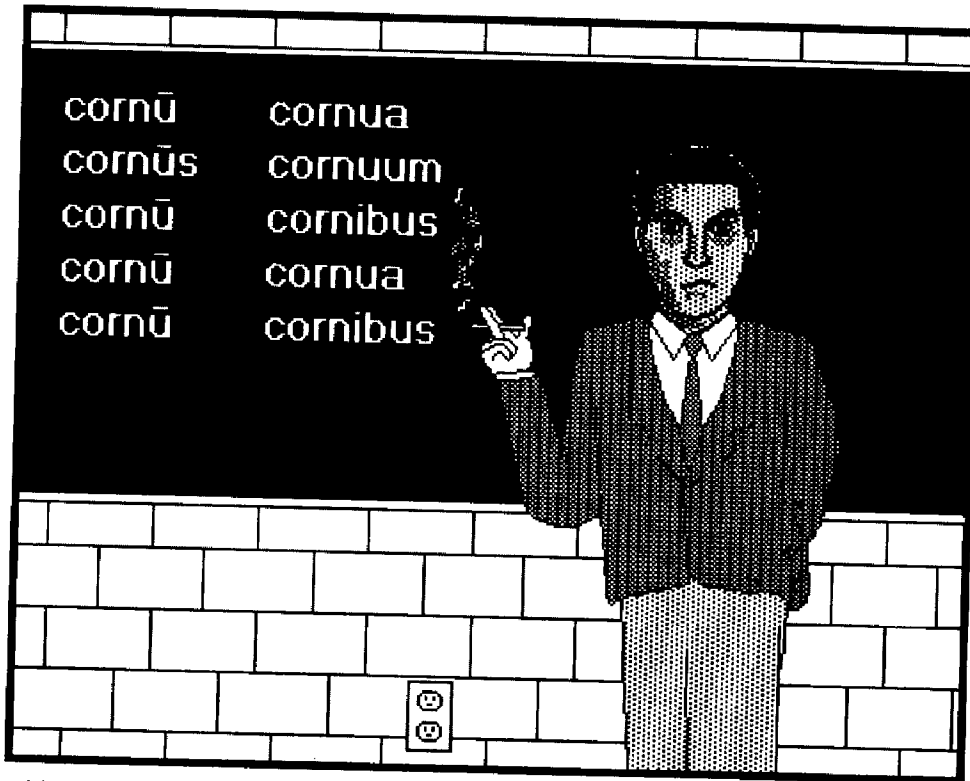
Like phonological rules, rules of morphology may be lost, added, or changed. We can observe some of these changes by comparing older and newer forms of the language or by looking at different dialects.

Extensive changes in rules of morphology have occurred in the history of the Indo-European languages. Latin had **case endings**, suffixes on the noun based on its grammatical relationship to the verb. These are no longer found in the Romance languages. (See chapter 5 for a more extensive discussion of grammatical case.) The following is a **declension**, or list of cases, for the Latin noun *lupus*, “wolf”:

Noun	Noun Stem	Case Ending	Case	Example
<i>lupus</i>	<i>lup</i>	+ <i>us</i>	nominative	The <i>wolf</i> runs.
<i>lupī</i>	<i>lup</i>	+ <i>ī</i>	genitive	A sheep in <i>wolf</i> 's clothing
<i>lupō</i>	<i>lup</i>	+ <i>ō</i>	dative	Give food to <i>the wolf</i> .
<i>lupum</i>	<i>lup</i>	+ <i>um</i>	accusative	I love <i>the wolf</i> .
<i>lupe</i>	<i>lup</i>	+ <i>e</i>	vocative	<i>Wolf</i> , come here!

In *Alice's Adventures in Wonderland*, Lewis Carroll has Alice give us a brief lesson in grammatical case. Alice has become very small and is swimming around in a pool of her own tears with a mouse that she wishes to befriend:

“Would it be of any use, now,” thought Alice, “to speak to this mouse? Every thing is so out-of-the-way down here, that I should think very likely it can talk at any rate, there's no harm in trying.” So she began: “O Mouse, do you know



You are now entering another declension, a declension not of adjectives, not of articles, but of nouns...

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the way out of this pool? I am very tired of swimming about here, O Mouse!" (Alice thought this must be the right way of speaking to a mouse: she had never done such a thing before, but she remembered having seen in her brother's Latin Grammar, "A mouse-of a mouse-to a mouse- a mouse-O mouse!")

Alice gives the English corresponding to the nominative, genitive, dative, accusative, and vocative cases.

Ancient Greek and Sanskrit also had extensive case systems expressed morphologically through noun suffixing, as did Old English, as illustrated by the following noun forms:

Case	OE Singular	OE Plural
nominative	stān "stone"	stānas "stones"
genitive	stānes "stone's"	stāna "stones"
dative	stāne "stone"	stānum "stones"
accusative	stān "stone"	stānas "stones"

Lithuanian and Russian retain much of the early Indo-European case system, but changes have all but obliterated it in most modern Indo-European languages. In English, phonological changes over the centuries resulted in the loss of many case endings.

English retains the genitive case, which is written with an apostrophe *s*, as in *Robert's dog*, but that's all that remains as far as nouns are concerned. Pronouns retain a few more traces: *he/she* are nominative, *him/her* accusative and dative, and *his/hers* genitive.

English has replaced its depleted case system with an equally expressive system of prepositions. For example the dative case is often indicated by the preposition *to* and the genitive case by the preposition *of*. A noun occurring after a verb with no intervening preposition is often, but not always, in the accusative case.

English and most of the Indo-European languages, then, have undergone extensive morphological changes over the past 1,000 years, many of them induced by changes that took place in the phonological rules of the language.

Syntactic Change

All things change except the love of change.

Anonymous, *Madrigal* (1910)

The loss of case endings in English occurred together with changes in the rules of syntax governing word order. In Old English, word order was freer because the case endings on nouns indicated the meaning relations in a sentence.

Additionally, Modern English is an SVO (Subject-Verb-Object) language. Old English was both an SVO and an SOV language.³ Sentences like *Se man þone kyning sloh*, literally *the man the king slew*, were grammatical. Thus the phrase structure rules that determine the word order of basic sentences changed in the history of English.

The syntactic rules relating to the English negative construction also underwent a number of changes from Old English to the present. In Modern English, negation is expressed by adding *not* or *do not*. We may also express negation by adding words like *never* or *no*:

I am going → I am not going
 I went → I did not go
 I go to school → I never go to school
 I want food → I don't want any food; I want no food

In Old English the main negation element was *ne*. It usually occurred before a verbal element:⁴

³ A later section in this chapter entitled "Types of Languages" explains this in more detail.

⁴ From E. C. Traugott. 1972. *The History of English Syntax*. New York: Holt, Rinehart, and Winston.

þæt he *na* sibþan geboren *ne* wurde
 that he never after born not would-be
 that he should never be born after that

ac hie *ne* dorston þær on cuman
 but they not dared there on come
 but they dared not land there

In the first example, the word order is different from that of Modern English, and there are two negatives: *na* (a contraction of *ne* + *a*, “not” + “ever” = “never”) and *ne*. As shown, a double negative was grammatical in Old English. Although double negatives are ungrammatical in Modern Standard American English, they are grammatical in some English dialects.

In addition to the contraction of *ne* + *a* → *na*, other negative contractions occurred in Old English: *ne* could be attached to *habb-* “have,” *wes-* “be,” *wit-* “know,” and *will-* “will” to form *nabb-*, *nes-*, *nyt-*, and *nyll-*, respectively.

Modern English also has contraction rules that change *do* + *not* into *don't*, *will* + *not* into *won't*, and so on. In these contractions the phonetic form of the negation element always comes at the *end* of the word because Modern English word order puts the *not* after the auxiliary verb. In Old English, the negative element occurred at the beginning of the contraction because it preceded the auxiliary verb. The rules determining the placement of the negative morpheme have changed. Such syntactic changes may take centuries to be completed, and there are often intermediate stages.

Another syntactic change in English affected the rules of comparative and superlative constructions. Today we form the comparative by adding *-er* to the adjective or by inserting *more* before it; the superlative is formed by adding *-est* or by inserting *most*. In Malory's *Tales of King Arthur*, written in 1470, double comparatives and double superlatives occur, which today are ungrammatical: *more gladder*, *more lower*, *moost royallest*, *moost shamefullest*.

When we study a language solely from written records, which is necessarily the case with nonmodern languages such as Elizabethan English (sixteenth century), we see only sentences that are grammatical unless ungrammatical sentences are used deliberately. Without native speakers of Elizabethan English to query, we can only infer what was ungrammatical. Such inference leads us to believe that expressions like *the Queen of England's crown* were ungrammatical in former versions of English. The title *The Wife's Tale of Bath* (rather than *The Wife of Bath's Tale*) in *The Canterbury Tales* supports this inference. Modern English, on the other hand, allows some rather complex constructions that involve the possessive marker. An English speaker can use possessive constructions such as

The girl whose sister I'm dating's roommate is pretty.
 The man from Boston's hat fell off.

Older versions of English had to resort to an *of* construction to express the same thought (*The hat of the man from Boston fell off*). A syntactic change took place that accounts for the extended use of the possessive morpheme 's.

Lexical Change

Changes in the lexicon also occur. Among them are changes in the lexical category in which a word may function.

The word *menu* is ordinarily used only as a noun, but the waiter in the *New Yorker* cartoon uses it as a verb. If speakers adopt the usage, *menu* will take on the additional lexical category of verb in their mental lexicons. Such changes are common and are often put into effect in special usage situations. The noun *window* is used as a verb by carpenters as in, "Tomorrow we have to window the upper story," where *to window* means "put window frames in a house under construction." Recently, a radio announcer said that Congress was "to-ing and fro-ing" on a certain issue, to mean "wavering." This strange compound verb is derived from the adverb *to and fro*. In British English, *hoover* is a verb meaning "to vacuum up," derived from the proper noun *Hoover*, the name of a vacuum cleaner manufacturer. American police *Mirandize* arrested persons, meaning to read them their rights according to the Miranda rule. Since the judicial ruling was made in 1966, we have a complete history on how a proper name became a verb.

The word *telephone* was coined exclusively as a noun in 1844 and meant "acoustic apparatus." Alexander Graham Bell appropriated the word for his invention in 1876, and



"Have you folks been menued yet?"

Drawn by Bernard Schoenbaum; copyright © 2000 The New Yorker Collection. All rights reserved.

in 1877 the word was first used as a verb, meaning "to speak by telephone." In languages where verbs have a specific morphological form such as the *-er* ending in French (*parler*, to speak), or the *-en* ending in German (*sprechen*, to speak), such changes are less common than in English. Thus the French noun *téléphone* cannot be a verb, but becomes the different word *téléphoner* as a verb.

Other categorical changes may occur historically. The word *remote* was once only an adjective, but with the invention of control-at-a-distance devices, the compound *remote control* came into usage, which ultimately was shortened to *remote*, which now functions as a noun; witness the half dozen remotes every modern household loses track of.

A recent announcement at North Carolina State University invited "all faculty to sandwich in the Watauga Seminar." We were not invited to squeeze together, rather to bring our lunches. Although the verb *to sandwich* exists, the new verbal usage is derived from the noun *sandwich* rather than the verb.

Addition of New Words

And to bring in a new word by the head and shoulders, they leave out the old one.

Montaigne

In chapter 3 we discussed ways in which new words can enter the language. These included deriving words from names (*sandwich*), blends (*smog*), back-formations (*edit*), acronyms (*NATO*), and abbreviations or clippings (*ad*). We also saw that new words may be formed by derivational processes, as in *uglification*, *finalize*, and *finalization*.

Compounding is a particularly productive means of creating words. Thousands of common English words have entered the language by this process, including *afternoon*, *bigmouth*, *cyberspace*, *egghead*, *force feed*, *global warming*, *icecap*, *jet set*, *laptop*, *moreover*, *nursemaid*, *offshore*, *pothole*, *railroad*, *skybox*, *takeover*, *undergo*, *water cooler*, *X-ray*, and *zookeeper*.

Other methods for enlarging the vocabulary that were discussed include word coinage. Societies often require new words to describe changes in technology, sports, entertainment, and so on. Languages are accommodating and inventive in meeting these needs. The words may be entirely new, as *steganography*, the concealment of information in an electronic document, or *micropolitan*, a city of less than 10,000 people. Even new bound morphemes may enter the language. The prefix *e-* as in *e-commerce*, *e-mail*, *e-trade*, meaning "electronic," is barely two decades old. The suffix *-gate*, meaning "scandal," derived from the Watergate scandal of the 1970s, may now be suffixed to a word to convey that meaning. Thus *Irangate* meant a scandal involving Iran, and *Dianagate*, a British usage, referred to a scandal involving wiretapped conversations of the late Princess of Wales, Diana. A change currently underway is the use of *-peat* to mean "win a championship so many years in succession," as in *threepeat* and *fourpeat*, which we have observed in the newspaper.

A word so new that its spelling is still in doubt is *dot com*, also seen in magazines as *.com*, and *dot.com*. It means "a company whose primary business centers on the Internet." The expression written 24/7, and pronounced *twenty-four seven*, meaning "all the time," also appears to be a new entry not yet found in dictionaries, but seen in newspapers and heard during news broadcasts.

Borrowings or Loan Words

Neither a borrower, nor a lender be.

William Shakespeare, *Titus Andronicus*

Languages ignore the “precept” of Polonius quoted above. Many of them are avid borrowers. **Borrowing** words from other languages is an important source of new words. Borrowing occurs when one language adds a word or morpheme from another language to its own lexicon. The pronunciation of the borrowed item is often altered to fit the phonological rules of the borrowing language. The borrowed word, of course, remains in the source language, so there is no need for its return. Languages are as much lenders and borrowers, and why shouldn’t they be since they lose nothing in the transaction? Most languages are borrowers, so their lexicon can be divided into native and nonnative, or **loan words**. A native word is one whose history or **etymology** can be traced back to the earliest known stages of the language.



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A language may borrow a word directly or indirectly. A direct borrowing means that the borrowed item is a native word in the language from which it is borrowed. *Feast* was borrowed directly from French and can be traced back to Latin *festum*. On the other hand, the word *algebra* was borrowed from Spanish, which in turn had borrowed it from Arabic. Thus *algebra* was indirectly borrowed from Arabic, with Spanish as an intermediary.

Some languages are heavy borrowers. Albanian has borrowed so heavily that few native words are retained. On the other hand, most Native American languages borrowed little from their neighbors.

English has borrowed extensively. Of the 20,000 or so words in common use, about three-fifths are borrowed. Of the 500 most frequently used words, however, only two-sevenths are borrowed, and since these words are used repeatedly in sentences, the actual frequency of appearance of native words is about 80 percent. *And, be, have, it, of, the, to, will, you, on, that, and is* are all native to English.

HISTORY THROUGH LOAN WORDS

A morsel of genuine history is a thing so rare as to be always valuable.

Thomas Jefferson

We may trace the history of the English-speaking peoples by studying the kinds of loan words in their language, their source, and when they were borrowed. Until the Norman Conquest in 1066, the Angles, the Saxons, and the Jutes inhabited England. They were of Germanic origin when they came to Britain in the fifth century to eventually become the English.⁵ Originally, they spoke Germanic dialects, from which Old English developed directly. These dialects contained a number of Latin borrowings but few foreign elements beyond that. These Germanic tribes had displaced the earlier Celtic inhabitants, whose influence on Old English was confined to a few Celtic place-names. (The modern languages Welsh, Irish, and Scots Gaelic are descended from the Celtic dialects.)

The Normans spoke French and for three centuries after the Conquest, French was the language used for all affairs of state and for most commercial, social, and cultural matters. The West Saxon literary language was abandoned, but regional varieties of English continued to be used in homes, in the churches, and in the marketplace. During these three centuries, vast numbers of French words entered English, of which the following are representative:

government	crown	prince	estate	parliament
nation	jury	judge	crime	sue
attorney	saint	miracle	charity	court
lechery	virgin	value	pray	mercy
religion	value	royal	money	society

Until the Normans came, when an Englishman slaughtered an ox for food, he ate *ox*. If it was a pig, he ate *pig*. If it was a sheep, he ate *sheep*. However, “ox” served at the Norman tables was *beef* (*boeuf*), “pig” was *pork* (*porc*), and “sheep” was *mutton* (*mouton*). These words were borrowed from French into English, as were the food-preparation words *boil*, *fry*, *stew*, and *roast*. Indeed, over the years French foods have given English a flood of borrowed words for menu preparers:

aspic	bisque	bouillon	brie	brioche
canapé	caviar	consommé	coq au vin	coupe
crêpe	croissant	croquette	croton	escargot
fondue	mousse	pâté	quiche	ragout

English borrowed many “learned” words from foreign sources during the Renaissance. In 1475 William Caxton introduced the printing press in England. By 1640, 55,000 books had been printed in English. The authors of these books used many Greek and Latin words, and as a result, many words of ancient Greek and Latin entered the language.

From Greek came *drama*, *comedy*, *tragedy*, *scene*, *botany*, *physics*, *zoology*, and *atomic*.

Latin loan words in English are numerous. They include:

bonus	scientific	exit	alumnus	quorum	describe
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⁵ The word *England* is derived from *Anglaland*, “Land of the Angles.”

During the ninth and tenth centuries, Scandinavian raiders, who eventually settled in the British Isles, left their traces in the English language. The pronouns *they*, *their*, and *them* are loan words from Old Norse, the predecessor of modern Danish, Norwegian, and Swedish. This period is the only time that English ever borrowed pronouns.

Bin, *flannel*, *clan*, *slogan*, and *whisky* are all words of Celtic origin, borrowed at various times from Welsh, Scots Gaelic, or Irish.

Dutch was a source of borrowed words, too, many of which are related to shipping: *buoy*, *freight*, *leak*, *pump*, *yacht*.

From German came *quartz*, *cobalt*, and — as we might guess — *sauerkraut*.

From Italian, many musical terms, including words describing opera houses, have been borrowed: *opera*, *piano*, *virtuoso*, *balcony*, and *mezzanine*. Italian also gave us *influenza*, which was derived from the Italian word for “influence” because the Italians were convinced that the disease was *influenced* by the stars.

Many scientific words were borrowed indirectly from Arabic, because early Arab scholarship in these fields was quite advanced. *Alcohol*, *algebra*, *cipher*, and *zero* are a small sample.

Spanish has loaned us (directly) *barbecue*, *cockroach*, and *ranch*, as well as *California*, literally “hot furnace.”

In America, the English-speaking colonists borrowed from Native American languages. They provided us with *hickory*, *chipmunk*, *opossum*, and *squash*, to mention only a few. Nearly half the names of U.S. states are borrowed from one American Indian language or another.

English has borrowed from Yiddish. Many non-Jews as well as non-Yiddish-speaking Jews use Yiddish words. There was once even a bumper sticker proclaiming: “Marcel Proust is a yenta.” *Yenta* is a Yiddish word meaning “gossipy woman” or “shrew.” *Lox*, “smoked salmon,” and *bagel*, “a hard roll resembling a doughnut,” now belong to English, as well as Yiddish expressions like *chutzpah*, *schmaltz*, *schlemiel*, *schmuck*, *schmo*, and *kibitz*.

English is also a lender of copious numbers of words to other languages, especially in the areas of technology, sports, and entertainment. Words and expressions such as *jazz*, *whisky*, *blue jeans*, *rock music*, *supermarket*, *baseball*, *picnic*, and *computer* have been borrowed by languages as diverse as Twi, Hungarian, Russian, and Japanese.

Loan translations are compound words or expressions whose parts are translated literally into the borrowing language. *Marriage of convenience* is a loan translation borrowed from French *mariage de convenance*. Spanish speakers eat *perros calientes*, a loan translation of *hot dogs* with an adjustment reversing the order of the adjective and noun, as required by the rules of Spanish syntax.

Loss of Words

Pease porridge hot
 Pease porridge cold
 Pease porridge in the pot nine days old

Nursery Rhyme

Words also can be lost from a language, though an old word's departure is never as striking as a new word's arrival. When a new word comes into vogue, its unusual presence draws attention; but a word is lost through inattention — nobody thinks of it; nobody uses it; and it fades away.

A reading of Shakespeare's works shows that English has lost many words, such as these taken from *Romeo and Juliet*: *beseem*, "to be suitable," *mammet*, "a doll or puppet," *wot*, "to know," *gyve*, "a fetter," *fain*, "gladly," and *wherefore*, "why."

More recently, it appears that the expression *two bits*, meaning "twenty-five cents," is no longer used by the younger generation and is in the process of being lost (along with *four bits*, *six bits*, etc.). The word *stile*, meaning "steps crossing a fence or gate," is no longer widely understood. Other similar words for describing rural objects are fading out of the language due to urbanization. *Pease*, from which *pea* is a back formation, is gone, and *porridge*, meaning "boiled cereal grain," is falling out of usage, though it is sustained by a discussion of its ideal serving temperature in the children's story *Goldilocks and the Three Bears*.

Technological change may also be the cause for the loss of words. *Acutiator* once meant "sharpeners of weapons" and *tormentum* once meant "siege engine." Advances in warfare have put these terms out of business. Although one still finds the words *buckboard*, *buggy*, *dogcart*, *hansom*, *surrey*, and *tumbrel* in the dictionary — all of them referring to subtly different kinds of horse-drawn carriages — progress in transportation is likely to render these terms obsolete and eventually they will be lost.

Semantic Change

The language of this country being always upon the flux, the Struldbruggs of one age do not understand those of another, neither are they able after two hundred years to hold any conversation (farther than by a few general words) with their neighbors the mortals, and thus they lie under the disadvantage of living like foreigners in their own country.

Jonathan Swift, *Gulliver's Travels*

We have seen that a language may gain or lose lexical items. Additionally, the meaning or semantic representation of words may change, by becoming broader or narrower, or by shifting.

BROADENING

When the meaning of a word becomes broader, that word means everything it used to mean, and more. The Middle English word *dogge* meant a specific breed of dog, but it was eventually **broadened** to encompass all members of the species *canis familiaris*. The word *holiday* originally meant a day of religious significance, from "holy day." Today the word signifies any day on which we do not have to work. *Picture* used to mean "painted representation," but today you can take a picture with a camera. *Quarantine* once had the restricted meaning of "forty days' isolation."

More recent broadenings, spurred by the computer age, are *computer* itself, *mouse*, *cookie*, *cache*, *virus*, and *bundle*, to name but a few.

NARROWING

In the King James Version of the Bible (1611 C. E.), God says of the herbs and trees, "to you they shall be for meat" (Genesis 1:29). To a speaker of seventeenth-century English, *meat* meant "food," and *flesh* meant "meat." Since that time, semantic change has narrowed the meaning of *meat* to what it is in Modern English. The word *deer* once meant "beast" or "animal," as its German cognate *Tier* still does. The meaning of *deer* has been narrowed to a particular kind of animal. Similarly, the word *hound* used to be the general term for "dog," like the German *Hund*. Today *hound* means a special kind of dog, one used for hunting. The word *davenport* once meant "sofa" or "small writing desk." Today, in American English, its meaning has narrowed to "sofa" alone.

MEANING SHIFTS

The third kind of semantic change that a lexical item may undergo is a shift in meaning. The word *knight* once meant "youth" but shifted to "mounted man-at-arms." *Lust* used to mean simply "pleasure," with no negative or sexual overtones. *Lewd* was merely "ignorant," and *immoral* meant "not customary." *Silly* used to mean "happy" in Old English. By the Middle English period it had come to mean "naive," and only in Modern English does it mean "foolish." The overworked Modern English word *nice* meant "ignorant" a thousand years ago. When Juliet tells Romeo, "I am too *fond*," she is not claiming she likes Romeo too much. She means "I am too *foolish*."

Reconstructing "Dead" Languages

The branch of linguistics that deals with how languages change, what kinds of changes occur, and why they occurred is called **historical and comparative linguistics**. It is



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"historical" because it deals with the history of particular languages; it is "comparative" because it deals with relations among languages.

The Nineteenth-Century Comparativists

When agreement is found in words in two languages, and so frequently that rules may be drawn up for the shift in letters from one to the other, then there is a fundamental relationship between the two languages.

RASMUS RASK

The nineteenth-century historical and comparative linguists based their theories on observations of regular sound correspondences among certain languages, and that languages displaying systematic similarities and differences must have descended from a common source language — that is, were genetically related.

The chief goal of these linguists was to develop and elucidate the genetic relationships that exist among the world's languages. They aimed to establish the major language families of the world and to define principles for the classification of languages. Their work grew out of earlier research.

As a child, Sir William Jones had an astounding propensity for learning languages, including so-called dead ones such as Ancient Greek and Latin. As an adult he found it best to reside in India because of his sympathy for the rebellious American colonists. There he distinguished himself both as a jurist, holding a position on the Bengal Supreme Court, and as an "Orientalist," as certain linguists were then called.

In Calcutta he took up the study of Sanskrit, just for fun, mind you, and in 1786 delivered a paper in which he observed that Sanskrit bore to Greek and Latin "a stronger affinity . . . than could possibly have been produced by accident." Jones suggested that these three languages had "sprung from a common source" and that probably Germanic and Celtic had the same origin.

About thirty years after Jones delivered his important paper, the German linguist Franz Bopp pointed out the relationships among Sanskrit, Latin, Greek, Persian, and Germanic. At the same time, a young Danish scholar named Rasmus Rask corroborated these results, and brought Lithuanian and Armenian into the relationship as well. Rask was the first scholar to describe formally the regularity of certain phonological differences of related languages.

Rask's investigation of these regularities inspired the German linguist Jakob Grimm (of fairy-tale fame), who published a four-volume treatise (1819–1822) that specified the regular sound correspondences among Sanskrit, Greek, Latin, and the Germanic languages. It was not only the similarities that intrigued Grimm and the other linguists, but the systematic nature of the differences. Where Latin has a [p], English often has an [f]; where Latin has a [t], English often has a [θ]; where Latin has a [k], English often has an [h].

Grimm pointed out that certain phonological changes that did not take place in Sanskrit, Greek, or Latin must have occurred early in the history of the Germanic languages. Because the changes were so strikingly regular, they became known as **Grimm's law**, which is illustrated in Figure 11.2.

Grimm's Law can be expressed in terms of natural classes of speech sounds: Voiced aspirates become unaspirated; voiced stops become voiceless; voiceless stops become fricatives.

Earlier stage: ^a	bh	dh	gh	b	d	g	p	t	k
	↓	↓	↓	↓	↓	↓	↓	↓	↓
Later stage:	b	d	g	p	t	k	f	θ	x (or h)

^aThis "earlier stage" is Indo-European. The symbols bh, dh, and gh are breathy voiced stop consonants. These phonemes are often called "voiced aspirates."

Figure 11.2 Grimm's Law, an early Germanic sound shift.

COGNATES

Cognates are words in related languages that developed from the same ancestral root, such as English *horn* and Latin *cornū*. Cognates often, but not always, have the same meaning in the different languages. From cognates we can observe sound correspondences and from them deduce sound changes. In Figure 11.3 the regular correspondence *p-p-f* of cognates from Sanskrit, Latin, and Germanic (represented by English) indicates that the languages are genetically related. Indo-European **p* is posited as the origin of the *p-p-f* correspondence.⁶



"Shouldn't a unicorn be called a uniHORN?"

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⁶ The asterisk before a letter indicates a reconstructed sound, not an unacceptable form. This use of asterisk occurs only in this chapter.

Indo-European	Sanskrit	Latin	English
*p	p	p	f
	pitar-	pater	father
	pad-	ped-	foot
	No cognate	piscis	fish
	paśu ¹	pecu	fec

¹ś is a sibilant pronounced differently than s was pronounced.

Figure 11.3 Cognates of Indo-European *p.

Figure 11.4 is a more detailed chart of correspondences, where a single representative example of each regular correspondence is presented. In most cases cognate sets exhibit the same correspondence, which leads to the reconstruction of the Indo-European sound shown in the first column.

Indo-European	Sanskrit	Latin	English
*p	p pitar-	p pater	f father
*t	t trayas	t trēs	θ three
*k	ś śun	k canis	h hound
*b	b No cognate	b labium	p lip
*d	d dva-	d duo	t two
*g	j ajras	g ager	k acre
*bh	bh bhrātar-	f frāter	b brother
*dh	dh dhā	f fē-ci	d do
*gh	h vah-	h veh-ō	g wagon

Figure 11.4 Some Indo-European sound correspondences.

Sanskrit underwent the fewest consonant changes, while Latin underwent somewhat more, and Germanic (under Grimm's Law) underwent almost a complete restructuring. Still, the fact that the phonemes and phonological rules, not individual words, changed has resulted in the remarkably regular correspondences that allow us to reconstruct much of the Indo-European sound system.

Exceptions can be found to these regular correspondences, as Grimm was aware. He stated: "The sound shift is a general tendency; it is not followed in every case." Karl Verner explained some of the exceptions to Grimm's Law in 1875. He formulated **Verner's Law** to show why Indo-European *p*, *t*, and *k* failed to correspond to *f*, *θ*, and *x* in certain cases:

Verner's Law: When the preceding vowel was unstressed, *f*, *θ*, and *x* underwent a further change to *b*, *d*, and *g*.