

Second Edition

C. M. Millward

Boston University

xvi Preface

Edward Kline, University of Notre Dame;
Ruth Lehmann, The University of Texas at Austin;
Samuel Monsen, Brigham Young University;
Peter Richardson, University of North Texas;
Norman Stageberg, University of Northern Iowa;
Elizabeth Traugott, Stanford University;
Jacqueline de Weever, Brooklyn College;
Gernot Weiland, University of British Columbia;
Charles Wright, University of Illinois at Urbana—Champaign.

C.M.M.



INTRODUCTION

Language is a perpetual Orphic song, Which rules with Daedal harmony a throng

Of thoughts and forms, which else senseless and shapeless were.

-PERCY BYSSHE SHELLEY



Everyone knows intuitively what language is, but it is notoriously difficult to define. Rather than become entangled in an unresolvable argument, we shall define language for our purposes as a systematic and conventional means of human communication by way of vocal sounds; it may (or may not) include written symbols corresponding in some way to these vocal sounds. A single language, such as English or Hungarian, is a specific, established example of such a communication system used in common by the members of a particular community.

Features Common to All Languages

ALL LANGUAGES ARE SYSTEMATIC

All languages, including of course English, are systems, or, more precisely, series of interrelated systems governed by rules. In other words, languages are highly structured; they consist of patterns that recur in various combinations and rules that apply to produce these patterns. A simple English example would be the systematic alternation between a and an produced by the rule that an is used before words beginning with a vowel sound, and a is used otherwise. Much more complex rules account for the grammaticality of such verb phrases as might have been picking and will have been picking but the ungrammaticality of *might will been picking or *might been have picking.\frac{1}{2}

A moment's reflection will reveal that if languages were not highly systematic and ruled, we could never learn them and use them. Speakers learn the rules of their language(s) as children and then apply them automatically for the rest of their lives. No native speaker of English, for example, has to stop in the middle of a sentence and think about how to pronounce the plurals of *rate*, *race*, or *raid*. Even though the plurals of all three of these words are pronounced differently, we learned at a very young age that the different forms are predictable and how to predict them. It is precisely in those areas of language that lack system or are exceptions to the rules that mistakes in usage occur. Children who say "My foots are dirty" are demonstrating, not that they do not know the rules of English, but rather that they know the rules well, although they have not mastered the exceptions.

The interrelated systems of a language include phonology, morphology, syntax, lexicon, and semantics. Languages that have a written representation (and not all languages do) also have a system of graphics. All languages have the same *set* of systems (with the possible exception of graphics), but the components of the systems and the interrelationships among the systems differ from language to language. Both German and Turkish have phonological systems, but the sounds that make up these systems differ from each other and from English sounds.

Phonology is the sounds of a language and the study of these sounds. The study of the sounds of speech taken simply as sounds and not necessarily as members of a system is called **phonetics**. The study of the sounds of a given language as significantly

¹ An asterisk (*) before a word, phrase, or other linguistic form means either (1) that it is ungrammatical or (2) that it is a hypothetical form, assumed to have existed but not actually recorded.

contrastive members of a system is called **phonemics**, and the members of the system are called **phonemes**. The distinction between phonetics and phonemics is important. For example, the English pronunciation of p in the word pan is accompanied by a strong puff of air called aspiration, whereas the p in the word span has no such strong aspiration. The two kinds of p are different phones, but not different phonemes because the two varieties of p never contrast. That is, the strong aspiration occurs only when p is at the beginning of the syllable and not when p follows s. Therefore the two varieties of p are not used to distinguish two different words, and the difference between them is not phonemic. On the other hand, the initial sounds in the words pan and tan serve to distinguish these two words; the p and the t contrast significantly and are classified as separate phonemes. Phonology will be discussed in much greater detail in Chapter 2; for the moment, it is sufficient to note that phonemes are building blocks of language, but have no meaning in and of themselves.

Morphology is the arrangement and relationships of the smallest meaningful units in a language. These minimum units of meaning are called morphemes. Although at first thought the word may seem to be the basic unit of meaning, words like *fireproof* and *snowplow* clearly consist of more than one meaningful element. Somewhat less obviously, the word *joyous* consists of a base word *joy* and a suffix morpheme -ous, which means something like "an adjective made from a noun" and appears on many other words, such as *poisonous*, *grievous*, and *thunderous*. The word *unsightly* consists of three morphemes: *un*-, *sight*, and -ly. The verb *eats* consists of the base morpheme *eat* and the third-person singular present indicative morpheme -s. Note that morphemes are not identical to syllables: the form *don't* has one syllable but two morphemes, *do* and *not*. Conversely, the word *Wisconsin* has three syllables but is a single morpheme.

It is often useful to distinguish between **free** and **bound** morphemes. Free morphemes can be used alone as independent words—for example, *take*, *for*, *each*, *the*, *panda*. Bound morphemes form words only when attached to at least one other morpheme; *re-*, *dis-*, *un-*, *-ing*, *-ful*, and *-tion* are all bound morphemes. The most familiar bound morphemes are **affixes** (that is, prefixes and suffixes), but even bases (forms to which affixes are attached) can be bound. An example of a bound base is the *-cept* of such words as *except*, *accept*, *deceptive*, and *reception*; although *-cept* derives from an independent Latin verb *capere* 'to take', it appears only as a bound morpheme in English.

As just noted, affixes may be either prefixes or suffixes. (Some languages also have infixes, which appear inside a word, but these are not important for English.) Another classification of affixes distinguishes **inflectional** and **derivational** affixes. An inflectional affix indicates a grammatical feature such as number or tense. For instance, the -s used to form plurals and the -ed used to indicate past tense are inflectional affixes. Present-Day English has few inflectional affixes, but Old English had many more.

Derivational affixes may be either prefixes or suffixes. In English, most derivational prefixes simply change the meaning of the word to which they are attached (uniform, transplant, microwave, unbelievable, desensitize), though some change the part of speech; e.g., the prefix em- changes the noun power to a verb, and the prefix a- changes the verb twitter to an adjective. Derivational suffixes normally change the part-of-speech category and may also change the meaning of the word to which they are attached. For

example, the derivational suffix -ive in generative changes the verb generate to an adjective; the suffix -ness in coolness changes the adjective cool to a noun; the suffix -ify in codify changes the noun code to a verb. In joyless, the suffix -less not only changes the noun to an adjective, it also changes the meaning of the resulting word to the opposite of the original meaning.

The same morpheme sometimes has different forms, depending on its environment. For example, the past-tense morpheme is pronounced like t in stopped, raced, and laughed; like d in stabbed, raised, and slaved; and like ed in wanted and braided. Each of these variants is called an allomorph of the past-tense morpheme. The words attentive, contend, extension, and intense all contain different allomorphs of a single bound morpheme going back to Latin tendere 'to stretch'. Note that \emptyset can also be an allomorph or morpheme; \emptyset is the plural allomorph of the word sheep.

Another distinction can be made between **lexical** and **function** morphemes and words. Lexical morphemes (usually nouns, adjectives, and verbs) are content words, words with referents in the real world. Examples would be *radio*, *nasty*, and *swim*. Function words or morphemes (usually conjunctions, pronouns, demonstratives, articles, and prepositions) signal relationships within the language itself; examples are *but*, *oneself*, *these*, *a*, *of*, and *than*. In practice, many morphemes or words have both lexical and functional aspects. For instance, *in* is primarily a function word in *we are in love* or *one child in ten*, but also has a real-world spatial meaning of "within" in *there's a spider in the sink*.

Syntax is the arrangement of words into phrases, clauses, and sentences; loosely speaking, it is word order. A simple example like the difference between *I had stolen my car* and *I had my car stolen* illustrates how crucial syntax is in English. English speakers have more options with respect to syntax than they do with respect to phonology or morphology. That is, they cannot expect to be understood if they refer to a canine mammal as a *god* instead of a *dog*; but they do have the option of saying either *I like dogs* or *Dogs I like*. This freedom is limited, however; they cannot say **Like dogs I* or **Like I dogs*. In the following chapters we will see that the word order of the major elements of English sentences has become, with a few exceptions, more rigid over time, but that many basic patterns of modern English syntax were already established by Old English times.

The **lexicon** of a language is the list of all the morphemes in the language. In linguistic terminology, a lexicon differs from vocabulary or a dictionary of a language in that it includes not only independent words but also morphemes that do not appear as independent words, including affixes such as *-ed*, *-s*, *mis-*, and *poly-*, and bound forms like the *-clude* of *include*, *exclude*, and *preclude*, which appear only as parts of words and never as independent words. The lexicon of a language is much less obviously structured and predictable than are its phonology, morphology, and syntax. It is also much more susceptible to outside influences. One of the most remarkable features of English today is the great size and diversity of origin of its lexicon. The following chapters will discuss how and when this great change in the English lexicon took place.

Semantics is the study of meanings or all the meanings expressed by a language. It is the relationship between language and the real world, between the sounds we make and what we are talking about. Like all other aspects of language, meanings change

over time. There are a number of possible ways of classifying types of semantic change, none of them totally satisfactory. In this book, we will identify the following kinds of change: (1) generalization and narrowing, (2) amelioration and pejoration, (3) strengthening and weakening, (4) abstraction and concretization, (5) shift in denotation, and (6) shift in connotation.

Generalization and Narrowing. Generalization is extension of meaning to cover wider semantic areas. For example, the Indo-European root bhares- meant "barley" (and is in fact the ancestor of the English word barley). But the Latin descendant of this root, far, could be used to mean cereal grain of various types and thus is the source of our word farina, a fine meal prepared from any cereal grain. Narrowing, a more common type of change in English than generalization, is a restriction in the range of meaning(s) of a word. An example of narrowing would be the English word mead, an alcoholic beverage made from fermented honey. Its origin is the Indo-European root medhu-, which referred to both honey and mead; because English has the word honey to refer to the unfermented fluid, the meaning of mead can be narrowed to refer only to the fermented product.

Amelioration and Pejoration. Amelioration, or a change to a more favorable meaning, can be exemplified by the English word *croon*, borrowed from the Middle Dutch word *kronen*. In English, it means to hum or sing softly, but in Middle Dutch it meant to groan or lament. Pejoration, the opposite of amelioration, is a change to a more negative meaning. For example, the English word *fool* comes from the Latin word *follis*, which originally meant only "bellows," but came to mean "windbag, airhead," i.e., a fool, a pejoration that passed into English when the word was borrowed.

Strengthening and Weakening. Strengthening, or intensification of meaning, is relatively rare. One example is the word drown, from the same root as the words drink and drench. Because of the universal tendency to exaggerate, weakening of meaning is much more common than strengthening. Two of the many possible instances of weakening between Old English (OE) and Present-Day English (PDE) are OE sona 'immediately', PDE soon; and OE cwellan 'kill, murder', PDE quell.

Abstraction and Concretization. Abstraction occurs when a specific, concrete meaning changes to a more abstract meaning. For instance, OE hæben once meant simply "one dwelling on the heath," but because of the association of heath with wilderness and lack of civilization, the term heathen acquired its present more abstract meaning of "irreligious, unenlightened, uncivilized." Concretization is the reverse process; as an example, one could cite the Indo-European root albho-, which meant "white." One of its reflexes is OE ælf, PDE elf, a change in meaning from the abstract quality of whiteness to an instance of something concrete that has this quality.

Shift in Denotation. A shift in denotation occurs when the real-world reference of a word changes. For example, OE *clud* meant "rock, hill," but its PDE descendant is *cloud*.

Shift in Connotation. Shifts in connotation are similar to amelioration and pejoration, but are not necessarily confined to simply positive vs. negative. Instead, the term refers to the entire set of associations that one makes to a word in addition to its denotative or literal sense. For example, in the lofty and dignified OE heroic poem Beowulf, after Beowulf and the dragon have killed each other, Beowulf's people prepare a solemn and majestic funeral for him. During the preparations, they must dispose of the dragon's corpse. The poet describes their actions as dracan ec scufun, wyrm ofer weallclif 'moreover, they shoved the dragon, the serpent over the cliff'. Scufun is from the verb scufan 'thrust, push'. The PDE verb shove still denotatively means to push, but the verb is no longer used in such dignified contexts; we would scarcely say that after Adam and Eve had been banished from Paradise, the angel shoved the gates shut. Incidentally, another word in this same line has undergone a dramatic shift, involving both narrowing of meaning and, to a lesser extent, a shift in stylistic level. Wyrm, glossed here as "serpent," is the ancestor of PDE worm. Its PDE meanings, including its use as a contemptuous term for people, date back to earliest OE, but in OE it could also mean "dragon, serpent, snake," even in the most elevated contexts.

Graphics as a linguistic term refers to the systematic representation of language in writing. A single unit in the system is called a **grapheme**. A single grapheme may represent a sound, as with the English letters d and l, a syllable, an entire word, or meaning itself with no correspondence to individual words, syllables, or sounds. (See Chapter 3 for a much more complete discussion of graphics.)

All of these various systems of language—phonology, morphology, syntax, lexicon, semantics, and even graphics-interact in highly complex ways within a given language. Changes within one subsystem can produce a chain reaction of changes among the other systems. For example, in the history of English, a sound change that entailed the loss of final unstressed syllables of words drastically affected the morphology of English by eliminating most English inflectional endings. This change in the morphology meant that the relationships among words in a sentence could no longer be made clear by inflectional endings alone. Hence word order, or syntax, became much more crucial in distinguishing meaning and also much more rigid. At the same time, prepositions became more important in clarifying relationships among the parts of a sentence. New prepositions were borrowed or formed from other parts of speech, as was the case with except and during, thus adding to the lexicon of the language. Previously existing prepositions were extended in use and meaning, thus creating syntactic and semantic change. For instance, the word to, which in Old English was simply a directional preposition or an adverb, took on many additional, primarily grammatical meanings, such as indicating an infinitive (to have, to worry) or even a kind of possession (the words to a song). Ultimately there was even a graphic change that distinguished the preposition from the adverb; the former retained its original spelling to, but an extra letter was added to the adverb too.

Interactions can also take place in the opposite direction. For example, when the grapheme p (representing θ) or δ , the initial sounds of *think* and *they*) was abandoned and replaced by *th*, some words which were previously spelled with *th* but pronounced θ . This is what happened to the proper name *Arthur*, formerly pronounced as if it were spelled *Arter*. Here a graphic change—the loss of the letter p—brought about a phonological change, minor though it was.

ALL NATURAL LANGUAGES ARE CONVENTIONAL AND ARBITRARY

All natural languages are both conventional and arbitrary. If the conventions are violated, communication fails. To take a simple example, English conventionally categorizes eating utensils as *forks*, *knives*, and *spoons*. A single English speaker cannot whimsically decide to call a *fork* a *spoon*, a *knife*, a *kiuma*, a *volochka*, or a *krof*. On the other hand, there is no particular reason why a pronged eating implement should have been called a *fork* in the first place; the French do nicely calling it a *fourchette*, and German speakers find *Gabel* quite satisfactory. The relationship between the implement itself and the sounds used to refer to it are purely arbitrary.

ALL NATURAL LANGUAGES ARE REDUNDANT

Natural languages are also highly redundant; that is, the same information is signaled in more than one way. Redundancy may be either external or internal to language. If I make a face and point to food in a dish as I say, "I hate tapioca pudding," my distorted face signals the same thing as the word hate, and the pointed finger indicates the same thing as the phrase tapioca pudding. The face-making and finger-pointing are examples of external redundancy. Internal redundancy can be illustrated by an utterance like He is a man. Here the subject is signaled twice—by its position at the beginning of the sentence before the verb and by its form (he instead of him or his). Singularity is signaled four times: by he (not they), by is (not are), by a (instead of no article at all), and by man (not men). Masculinity is signaled by both he and man. Third person is signaled by he and is. Animate noun is signaled by he and man. Finally, the fact that this utterance is a statement and not a question is indicated both by word order (compare Is he a man?) and by intonation (if the utterance is spoken) or punctuation (if it is written). Few utterances are as internally redundant as this somewhat unlikely example, but a certain amount of internal redundancy is essential to all language in order to counteract the effects of ever-present "noise" in the environment.

ALL NATURAL LANGUAGES CHANGE

Finally, all natural languages change. Because they change, they have histories. All languages change in different ways, so their histories are different. The history of a given language is the description of how it has changed over a period of time. The history of English is the record of how one dialect of West Germanic has changed over the past fifteen hundred years.

Events in language history are harder to define than most events in political history. Theoretically, a history of the English language could consist solely of statements like the ones below.

- On October 17, A.D. 784, Ecgfrith, son of Osric, used a dative *him* instead of an accusative *hine* as a direct object while speaking to his foster-brother Healfdane.
- Margery Fitzroy began pronouncing city with the major stress on the first syllable in 1379 after hearing her cousin Joanna, who was from London, pronounce it that way.

METAPHORICAL DOUBLETS

All language and all languages use metaphors extensively. They may be obvious, like *the foot of the bed*, or much less obvious, like *lighthearted*. What is perhaps surprising is that, regardless of the language they speak, people tend to invent the same metaphors over and over. English has many metaphorical "doublets," pairs of expressions of which one is a colloquial, even slangy, native formation, the other a more dignified, borrowed term from Latin, but both originating as metaphors using the same semantic associations.

For instance, assail is from Latin assilire 'to jump on'; compare this with the breezier English to jump all over someone. Delirium comes from Latin delirare 'to be deranged' and ultimately from de 'away' + lira 'furrow, track.' That is, one who is delirious is off the track, off his trolley. The Latin loan punctual, from Medieval Latin punctualis 'to the point' is completely parallel to English on the dot. Incur (Latin incurrere) has the same metaphorical origin as run into. The notion of understanding as being a kind of seizing by the mind is reflected in both comprehend (from Latin com 'together' + prehendere 'seize') and native English grasp.

On April 1, 1681, the pretentious young clerk Bartholomew Drew, while preparing a treatise on vinegar-making, decided that the English phrase "by drops" was inelegant and so paraded his learning by coining the adjective stillatitious from the Latin verb stillare.

Even assuming that we could retrieve and document such events, we quite properly feel that isolated examples of individual behavior like these are not historically significant in and of themselves. "Events" in the history of a language consist, not of isolated deviations or innovations by single speakers, but rather of changes in overall patterns or rules, changes that are adopted by a significant portion of the speakers of that language. It is of no particular interest that Ecgfrith, on one occasion, confused the dative and accusative forms of the third-person singular masculine personal pronoun. It is of interest that thousands of little Ecgfriths regularly used only dative forms of pronouns where their grandparents would have used both dative and accusative forms.

Changes in Language

WHAT IS LANGUAGE CHANGE?

Because all language is systematic, the history of any language is the history of change in its systems. By change, we mean a permanent alteration. That is, slips of the tongue, ad hoc coinages that are not adopted by other users of the language, "new" structures that result from one person's getting his or her syntax tangled in an overly ambitious

sentence are not regarded as change. Ephemeral slang that is widely used one year but that has been abandoned five years later occupies a kind of no-man's-land here; it is indeed part of the history of the language but has no permanent effect.

Changes in language may be systematic or sporadic. The addition of a vocabulary item to name a new product, for example, is a sporadic change that has little impact on the rest of the lexicon. Even some phonological changes are sporadic. For instance, many speakers of English pronounce the word *catch* to rhyme with *wretch* rather than with *hatch*. In their dialects an isolated sporadic change has occurred in the distribution of vowels—parallel words such as *hatch*, *batch*, *match*, or *scratch* have not undergone the change. Similarly, for some speakers, the word *yukky* (from the interjection *yukh*, meaning "I don't like it") has a sound not found elsewhere in English, a heavily aspirated glottal fricative.

Systematic changes, as the term suggests, affect an entire system or subsystem of the language. These changes may be either conditioned or unconditioned. A conditioned systematic change is brought about by context or environment, whether linguistic or extralinguistic. For many speakers of English, the short e vowel (as in bet) has, in some words, been replaced by a short i vowel (as in bit). For these speakers, pin and pen, him and hem are homophones (words pronounced the same). This change is conditioned because it occurs only in the context of a following m or n; pig and peg, hill and hell, middle and meddle are not pronounced alike for these speakers.

An unconditioned systematic change is one for which no specific conditioning factor can be identified. An example would be the tendency among many speakers of American English to move the stress of bisyllabic words from the second syllable to the first, as in *pólice*, *défense*, *Détroit*. We can speak vaguely of a general historical drift of English to move the stress toward the beginning of the word, but the fact remains that English today is characterized by variable stress placement; indeed, many words are distinguished in pronunciation primarily on the basis of differing stress (such as *píckup/pick úp*; *pérvert/pervért*, *áttribute/attríbute*). We cannot explain the change from *políce* to *pólice* as reflecting a simple underlying rule that all words should be stressed on the first syllable.

In simplest terms, all change consists of a loss of something, a gain of something, or both—a substitution of one thing for another. Both loss and gain occur in all the subsystems of natural languages. For example, over the centuries, English has lost the distinction between long and short vowels (phonological loss), between dative and accusative cases (morphological loss), the regular inversion of subject and verb after an adverbial (syntactic loss), the verb weorðan (lexical loss), the meaning "to put into" for the verb do (semantic loss), and the letter \eth (graphic loss). English has gained the diphthong represented by the spelling oi (phonological gain), a means of making nouns like dropout out of verb + adverb combinations (morphological gain), a distinction between past perfect (I had painted my room) and past causative (I had my room painted) (syntactic gain), the word education (lexical gain), the meaning of "helper" for the word hand (semantic gain), and the distinction between the letters u and v (graphic gain).

Loss may be absolute, as exemplified by the loss of h before l, r, and n (Old English hlude, hring, hnutu; Present-Day English loud, ring, nut), where the h (aspiration)

simply disappeared. Other loss may be the result of a merger of two formerly distinct units, as when Middle English [x], a heavily aspirated h-like sound, collapsed with [f] in words like *tough*, *rough*, and *enough*. Such a merger is sometimes called **fusion**.

Similarly, gain may result from the introduction of an entirely new unit; an example would be the addition in Middle English, cited above, of the diphthong oi through such French loan words as joy, poison, and joint. Or the gain may result from the split of a single unit into distinct units. For instance, Middle English discret(e) underwent both semantic and graphic split to become modern English discrete and discreet. Such a split is sometimes called **fission**.

Losses and gains, especially in phonology, morphology, and syntax, are normally considered irreversible, but occasionally are only temporary. For example, several dialects of American English had lost the phoneme /r/ except when it appeared before a vowel, but now once again have /r/ in all positions. Conversely, the use of do as a marker of the simple indicative (as in Shakespeare's *The cry did knock against my very heart*) was added in Early Modern English but has since disappeared.

All changes, whether major or minor, conditioned or unconditioned, disrupt a language, sometimes rather violently. But any living language is self-healing, and the permanent damage resulting from change is usually confined to the feelings of the users of the language. Many people deplore the recent introduction of *hopefully* as a sentence modifier, but the English language as a whole is none the worse for this usage. Similarly, the distinctions in meaning lost through the abandonment of the now nearly extinct subjunctive mood are today made through adverbs, modal auxiliaries, and word-order changes.

Change occurs at different rates and times within the subsystems of a language. A new loan word may be introduced and become widely accepted within a period of a few days, as with the Russian loan *sputnik* in 1957. Changes in phonology, on the other hand, operate much more slowly than isolated changes in lexicon. For any given speaker, a change in a pattern (rule) may be instantaneous, but for the total community of speakers it sometimes takes centuries for completion. The Great Vowel Shift of English took at least several generations to complete. (Some scholars claim that it is still going on today, five centuries after it began.) The loss of aspiration in such words as *which*, *whip*, and *white* began perhaps as long as a thousand years ago and is still not complete for all dialects.

In sum, for all natural languages, change is both inevitable and constant; only dead languages (languages with no native speakers) do not change. Because change is constant and has always been so, there is no such thing as a "pure" or a "decadent" language or dialect. There are only different languages and dialects, which arose in the first place only because all languages change.

The history of the English language, then, is the record of how its patterns and rules have changed over the centuries. The history of English is not the political history of its speakers, although their political history has affected their language, sometimes dramatically, as was the case with the Norman invasion of England in 1066. Nor is the history of the English language the same as the history of English literature, even though the language is the raw material of the literature. Indeed, the nature of any language

influences its literature and imposes certain limitations on it. For example, quantitative verse is impossible in English today because English does not distinguish long and short syllables. Compared to other languages, English is difficult to rhyme in because of its stress patterns and great variety of syllable endings. On the other hand, because of its stress patterns, English, unlike French, lends itself easily to alliteration. Any language with a literary tradition and extensive literacy will be affected by that literature. Grammatical structures originating in writing are transferred to the spoken language. Vocabulary items and phrases introduced in literature enter the spoken language. The written tradition tends to give rise to concepts of correctness and to act as a conservative influence on the spoken language.

WHY DOES LANGUAGE CHANGE?

In any science, the hardest question to answer is "why?" In many cases, the question is unanswerable. From one point of view, it is strange that human beings speak so many languages and that these languages undergo any changes at all. Other human activities are identical and unchanging everywhere—all human beings smile, cry, scream in terror, sleep, drink, and walk in essentially the same way. Why should they differ in speech, the one aspect of behavior that is uniquely human? The answer is that, whereas the capacity to learn language is innate, the particular language that anyone uses is learned. That is, the ability to learn languages is universal and unchanging, but the languages themselves are diverse and constantly changing.

Given that learned behavior can and often does change, what are the forces that trigger change? One explanation for linguistic change is the principle of least effort. According to this principle, language changes because speakers are "sloppy" and simplify their speech in various ways. Accordingly, abbreviated forms like *math* for *mathematics* and *plane* for *airplane* arise. *Going to* becomes *gonna* because the latter has two fewer phonemes to articulate. Intervocalic *t* becomes *d* because, first, voiced sounds require less energy to produce than voiceless sounds, and, second, the speaker does not have to switch from voiced to voiceless and then back to voiced again in a word like *little*. On the morphological level, speakers use *showed* instead of *shown* as the past participle of *show* so that they will have one less irregular verb form to remember.

The principle of least effort is an adequate explanation for many isolated changes, such as the reduction of $God\ be\ with\ you$ to $good\ bye$, and it probably plays an important role in most systemic changes, such as the loss of inflections in English. However, as an explanation for all linguistic change, it has shortcomings. How exactly are "difficulty" and "ease" to be defined? Judging by its rarity among the languages of the world and by how late English-speaking children master it, the phoneme θ (the first sound of think) must be difficult to articulate and hence highly susceptible to change. Yet it has survived intact throughout the entire history of English. Further, many changes cannot be explained either by basic communicative needs or by a principle of least effort. An example would be the development in Middle English of the extremely complex system of definite and indefinite articles in English, a system that is the despair of so many foreign learners of the language. Old English got along nicely with no indefinite article at all and with a form of that as both demonstrative and definite article.

Many languages today—for example, Russian, Chinese, and Japanese—have no articles at all. The principle of least effort by itself simply cannot explain the rise of articles in English.

Another explanation for language change is analogy. Under analogical change, two things or rules that were once different become identical or at least more alike. The principle of analogy is closely related to the principle of least effort; analogy is one way of achieving least effort. By analogy, a speaker reasons, usually unconsciously, that if A is like B in several respects, then it must be like B in other respects. If beans is a plural noun naming a kind of vegetable and has the singular form bean, then peas, which also names a kind of vegetable, must also be a plural and must have the singular form pea. (Historically, peas, or pease, was an uncountable singular noun; cf. the nursery rhyme "Pease porridge hot," which means simply "hot pea soup.") If, in noun phrases, single-word modifiers precede the noun they modify, then in the noun phrase attorney general, attorney must be the modifier and general, the noun. Therefore the plural of the phrase must be attorney generals, even though general was originally an adjective.

Analogy can operate at all levels of a language. On the semantic level, many people use the word *livid* to mean "bright," especially bright red, as in anger. Though historically *livid* means "pale," its sound association with *vivid* has led to analogical semantic change. Even spelling may be affected by analogy. The word *delight* historically contained no *-gh-*, but acquired these letters by analogy with such rhyming words as *light*, *fright*, *sight*, and *might*.

In general, the more common a word or construction, the less susceptible it is to change by analogy. Less frequently used words or constructions are more likely to be altered to fit the patterns of more common ones. Thus the verb *to be* remains wildly irregular in English because it is learned so early and used so often. But the relatively uncommon verb *thrive*, once conjugated as *thrive:throve:thriven*, is well on its way to becoming a weak (regular) verb.

Still another explanation frequently offered for language change is that children learn their native language imperfectly from their elders. Imperfect learning is surely one factor, but it cannot explain all change. For permanent linguistic change to occur, all children of a given speech community would have to make exactly the same mistakes. This intuitively seems unlikely. Further, there is ample evidence that linguistic change occurs beyond the childhood years. Many adults, consciously or unconsciously, alter their speech in various ways, changing even their phonology. For example, twenty years after moving to New England as a young adult, I have altered my own phonology to such an extent that my New York family comments on it. For a few words, this change was deliberate; because my Rhode Island neighbors mistook my pronunciation of the street on which I live (Forest Street) for Fourth Street, I deliberately altered my pronunciation of Forest to make the first syllable a homophone of far instead of for. In other instances, the change was unconscious; I was not aware that my pronunciation of words like class, past, half, and aunt had changed until acquaintances pointed it out to me.

More important than such anecdotal evidence is the fact that linguistic change occurs in aspects of language not even used by children learning the language. For

instance, over the centuries, English has developed complex structures of subordination that did not exist in Old English. Consider the sentence *Having no weapon with which to attack the mosquitoes whining around my head, I could only curse Joel for persuading me to come camping in an area that was noted for its ferocious predators.* Underlying this compact sentence are at least seven separate "simple" statements: (1) I had no weapon, (2) I could not attack the mosquitoes, (3) The mosquitoes whined around my head, (4) I could only curse Joel, (5) Joel persuaded me, (6) I came camping in an area, and (7) This area was noted for its ferocious predators. Young children today do not spontaneously produce such elaborate structures; even adults have to be trained in their use. Clearly these changes were introduced by adults. Another example is the change of the impersonal pronoun from earlier *man* to present-day *one*. Young children almost never use *one* as an impersonal pronoun today, and it is highly unlikely that they were responsible for its introduction.

INTERNAL AND EXTERNAL PRESSURES FOR CHANGE

In discussing the history of a language, it is often useful to distinguish **outer history** (or **external history**) from **inner history** (or **internal history**). The outer history is the events that have happened to the speakers of the language leading to changes in the language. For example, the Norman invasion brought French-speaking conquerors to England and made French the official language of England for about three hundred years. As a result, the English language was profoundly affected. The inner history of a language is the changes that occur within the language itself, changes that cannot be attributed directly to external forces. For instance, many words that were pronounced as late as the ninth century with a long a sound similar to that of father are today pronounced with a long o: Old English ham, gat, halig, and sar correspond to modern home, goat, holy, and sore. There is no evidence of an external cause for this change, and we can only assume that it resulted from pressures within the language system itself.

Among external pressures for language change, foreign contacts are the most obvious. They may be instigated by outright military invasion, by commercial relations, by immigration, or by the social prestige of a foreign language. The Viking invasions of England during the ninth and tenth centuries added, not surprisingly, many new lexical items to English. Less obviously, they contributed to (though were not the sole cause of) the loss of inflections in English because, although Norse and English were similar in many ways, their inflectional endings were quite different. One way of facilitating communication between speakers of the two languages would have been to drop the inflectional endings entirely. (Exactly the same process can be observed today when a speaker of Icelandic talks to a speaker of Swedish.) An example of the effects of the prestige of another language would be the spread of $/\mathbb{Z}/$ (the sound of s in usual) in French loanwords to environments where it had not previously appeared in English; examples include garage, beige, and genre.

Foreign pressures may also take the form of contact between different dialects of the same language. The changes cited above in my own speech resulting from contact with a new dialect exemplify this kind of influence. Here again, sociological factors may play a role. The reemergence of preconsonantal and final /r/ (as in harm and far) in Eastern Seaboard and Southern American dialects certainly has been encouraged by the sociological facts that r-lessness is frequently ridiculed in other areas of the country, that it is often associated with Black English, and that the prestige of American English vis-à-vis British English has increased in the past thirty years.

Internal pressures for language change most often appear when changes in one system of the language impinge on another system. For example, phonological changes caused the reflexes (the "descendants" that have undergone change) of OE lætan 'to allow' and OE lettan 'to hinder' to fall together as let. The resulting homonymy was unacceptable because the two verbs, opposite in meaning, often occurred in identical contexts, leading to ambiguity and a breakdown in communication. Consequently, the let that meant "hinder" has been all but lost in modern English, surviving only in such set phrases as let ball and the legal term without let or hindrance. On the morphological level, the verb wear, a weak verb in OE, has become a strong verb in modern English, despite the fact that the trend has been overwhelmingly in the opposite direction. This change can be explained by the rhyme analogy of wear with strong verbs like bear, tear, and swear and also, perhaps, by the semantic association of wear and tear.

Still other changes fall on the borderline between internal and external. British English still uses *stone* as a unit of weight for human beings and large animals, although the weight of other commodities is normally expressed in pounds. American English uses the pound as a measure for both large animals and other items. One of the reasons why *stone* has remained in British English may be that *pound* is semantically "overloaded" by being both a unit of weight and the national monetary unit. Similarly, in some parts of Great Britain, at least, a small storage room—the American English *closet*—is referred to as a *cupboard*. The avoidance of the term *closet* is probably explained by the fact that what speakers in the United States refer to as a *toilet* or *john* is called a *W.C.* (for *water closet*) in Britain. The mild taboo associated with the term *water closet*, even in its euphemistic abbreviated form, has led to its avoidance in other contexts.

PREDICTING CHANGE

Even though we can frequently offer convincing post hoc explanations for language change, we can seldom predict what specific changes will occur in the future, at least not until they are already under way. Obviously, extralinguistic events like invasions or sweeping technological changes will result in additions and losses to the lexicon. Once certain changes have begun, we can with some confidence predict that other changes will follow. For example, in recent American English, a t that appears between vowels and after the major stress of a word becomes d (consider the similar pronunciations of writer and rider). Because we know that the sounds t and d are paired in a system of consonants that also pairs k with g and p with b, it is quite possible that, under the same circumstances, k will become g and g will become g. Indeed, these changes have already been heard in the speech of some individuals, and seen in occasional misspellings such as signifigant. Fifty years ago, we could have accurately pre-

dicted that t would not become u or f, but we could not have predicted that it would become d.

Asymmetries, "weaknesses," or irregularities in the various subsystems of a language are normally prime targets for change. For example, Old English had, as a result of earlier sound changes, two sets of diphthongs, usually spelled *ea* and *eo*, that were apparently similar in pronunciation and did not fit symmetrically into the overall Old English vowel system. It is not surprising that these diphthongs had fallen together with other vowels by Middle English. By the same argument, however, we could predict a simplification of the overcrowded and asymmetric array of front vowels in English (the vowels of *beet*, *bit*, *bait*, *bet*, and *bat*). Yet these vowels have remained remarkably stable over the centuries. In sum, linguistic training and knowledge of linguistic history may allow us to predict which sorts of changes are likely, but seldom precisely which changes will actually take place.

FACTORS IMPEDING CHANGE

As a rule, if there are extensive ongoing changes in one subsystem of a language, other subsystems tend to remain fairly stable. For example, over the centuries, English has undergone drastic changes in its morphology, but has been relatively conservative in its phonology. In fact, the last major phonological change in English, the Great Vowel Shift, began only as the vast morphological alterations were ending and the morphology of English was settling down to what is essentially its present state. German, though closely related to English, has undergone many more phonological changes, but has been much more conservative than English in its morphology. Just as redundancy in language allows changes to occur in the first place, the necessity for redundancy prevents too many changes from occurring at the same time. Uncurbed change would lead to a total breakdown in communication.

Changes in the graphic system of a language come much more slowly than changes in other systems. English has not adopted a totally new grapheme (though a few have been lost and the distribution of others has been modified) since it began to be written in the Latin alphabet. Despite vast changes in pronunciation, English spelling has not been revised in any fundamental way for the past five hundred years. The third-person singular indicative ending -th (as in doth, hath) was still being written as late as two hundred years after all speakers were using the current -s ending in speech.

There are multiple reasons for this archconservatism of writing systems, most of them external to language itself. First, though speech is ephemeral, writing provides a permanent reference; we can go back to check what was written previously. Second, ever since the advent of printing, there have been practical arguments against graphic reform. The introduction of a revised spelling would entail a great deal of relearning by millions of literate adults, would necessitate complete revision of dictionaries, and would mean that earlier classics of English literature would be rendered inaccessible to current and future generations. If new letter forms were introduced for the miserably represented vowel system of English, then all existing keyboards and fonts would immediately become obsolete. Third, agreement on whose pronunciation the revised

spelling should be based upon would probably be impossible to achieve. Still another factor acting against graphic reform is the fact that the written language is, to a much greater degree than the spoken language, under the control of the highly educated or well-to-do, the most conservative groups in a culture.

Not only are graphic systems themselves resistant to change, but combined with a high level of literacy, they act as a brake on change in the spoken language and, occasionally, even reverse changes that have occurred in it. The reintroduction of post-vocalic /r/ in some American English dialects would have been impossible without the written language, because speakers would not have known where to put the /r/ without a written model. The commonly heard /t/ in often, /p/ in clapboard, and /h/ in forehead are all the results of spelling pronunciations. Hundreds of lexical items survive only because they have been preserved in the written language; examples include not only nouns naming obsolete objects such as firkin but even structural words like the conjunction lest.

Demarcating the History of English

Although linguistic change is a slow but unceasing process, like a slow-motion movie, so to speak, it is impracticable to try to describe the changes in this way. Instead, we must present them as a series of still photographs, noting what has changed in the interval between one photograph and the next. This procedure fails to capture the real dynamism of linguistic change, but it does have the advantage of allowing us to examine particular aspects in detail and at a leisurely pace before they disappear. The history of the English language is normally presented in four such still photographs—Old English, Middle English, Early Modern English, and Present-Day English. We will retain these traditional divisions, but also glance at the prehistory of English and speculate to some extent about English in the future.

The dividing lines between one period of English and the next are not sharp and dramatic: the English people did not go to bed on December 31, 1099, speaking Old English and wake up on January 1, 1100, speaking Middle English. Nevertheless, the changes that had accumulated by the year 1100 were sufficiently great to justify a different designation for the language after that date.

Old English (OE) is that stage of the language used between A.D. 450 and A.D. 1100. The period from 1100 to 1500 is Middle English (ME), the period between 1500 and 1800 is Early Modern English (EMnE), and the period since 1800 is Present-Day English (PDE). For those familiar with English history, these dates may look suspiciously close to dates of important political and social events in England. The beginning of ME is just a few years after the Norman Conquest, the beginning of EMnE parallels the English Renaissance and the introduction of printing into England, and the starting date for Present-Day English is on the heels of the American Revolution.

These parallels are neither accidental nor arbitrary. All of these political events are important in the outer history of English. The Norman Conquest had a cataclysmic effect on English because it brought thousands of Norman French speakers to England and because French subsequently became the official and prestigious language of the nation for three centuries. The introduction of printing, among other effects, led to a great increase in literacy, a standard written language, concepts of correctness, and the

brake on linguistic change that always accompanies widespread literacy. The American Revolution represents the beginning of the division of English into national dialects that would develop more or less independently and that would come to have their own standards.

Linguistically, these demarcation points of 450, 1100, 1500, and 1800 are also meaningful. The date 450 is that of the separation of the "English" speakers from their Continental relatives; it marks the beginning of English as a language, although the earliest surviving examples of written English date only from the seventh century. By 1100, English had lost so many of its inflections that it could no longer properly be called an inflecting language. By 1500, English had absorbed so many French loans that its vocabulary looked more like that of a Romance language than that of a Germanic language. Further, the very rhythms of the spoken language had changed under the influence of the differing stress patterns of these French loans. By 1800, the vast numbers of Latinate loans brought in by the English Renaissance had been absorbed, along with hundreds of exotic, often non-Indo-European words introduced through English exploration and colonization. Also, the grammar of English had, in most important respects, become that of the present day.

Evaluating Sources of Information

Our primary source of information about earlier stages of English is written texts. Except for the most recent times, texts outweigh in importance all other sources put together. Fortunately for the historian of the language, English has been written down almost from the beginning of its existence as an identifiable dialect of West Germanic; the earliest English texts date from the seventh century A.D.

Texts are not, however, without their problems. First, there simply are not enough of them. Further, no matter how many manuscripts we had, we would always be missing just what we needed from a given geographical area or time period. Or the text would perversely fail to contain crucial diagnostic forms. We cannot, of course, question a text to find out about words or structures that it does not include.

Second, texts must be interpreted. We can rarely take whatever we find at face value. Seemingly deviant forms may well be nothing more than clerical errors, the result of carelessness or of woolgathering on the part of the scribe, or, later, typesetter or proofreader. Here, patterns are important. For example, it would normally be of no particular significance if a writer of PDE spelled the word platter as pladder on one occasion. If, on the other hand, he or she also spelled traitor, deep-seated, and metal as trader, deep-seeded, and medal, respectively; and if he or she spelled pedal and tidy as pettle and tighty, we would have good reason to suspect that this writer did not distinguish /t/ and /d/ when these two came between two vowels and after the major stress of the word.

In using texts as a source of information, we also have to try to evaluate the extent to which tradition and convention have concealed real differences and similarities or, conversely, may have indicated differences or similarities that did not actually exist. If we had only spelling as evidence, we would have to assume that speakers today pronounce *I* and *eye* very differently; on the other hand, we would not know that there are two distinct pronunciations for the sequence of letters *wound*.

Chapter 1 Introduction

In this respect, the semieducated are better informants about how a language is actually pronounced than are well-educated writers. For example, we would never know from reading the works of Roger Williams, the founder of Rhode Island, that American colonists were regularly "dropping their r's" in unstressed syllables at the ends of words and after certain vowels. Williams had a Cambridge education and had learned conventional English spellings. However, legal records written by less well educated town clerks have scores of spellings like therefo, Edwad, fofeiture, and administe (for therefore, Edward, forfeiture, and administer), clear evidence that r-dropping goes back several centuries in New England speech.

In interpreting texts we must also bring to bear all the extralinguistic evidence we can garner. If a contemporary Canadian man writes *The wind bloweth where it listeth*, we know that he has some familiarity with the King James Bible, and also that he does not normally use the ending *-eth* for the third-person singular present indicative of verbs. Similarly, when an educated Englishwoman writes *There is a nice distinction to be made here*, we do not assume that she means "pleasant distinction," nor do we assume that every native speaker of English has the meaning "subtle, sensitive, precise" for the word *nice*. Such assumptions are relatively easy to make for Present-Day English texts because we are contemporaries of the writers, sharing their culture. The further back in time we go, the more difficult it is to appraise written texts because we have irretrievably lost so much information about the cultural background that surrounded the writers. Earlier connotations and stylistic levels of words are especially hard to determine with confidence.

A third problem with written texts as sources of information is that, at least for the first thousand years of English history, so many of the texts are translations, primarily from Latin or French. This fact limits the subject matter—and hence the vocabulary—of the text. More important, the original language may have influenced the vocabulary (loanwords), the syntax, and even the morphology. Anyone who has ever translated a text from a foreign language into English knows how difficult it is to produce a smooth English translation that is not influenced by the vocabulary and word order of its original. Certain Old English words or structures appear *only* in translations, evidence that Old English translators had the same difficulty; still, because most of the available texts are translations, the scholar has no alternative but to use them.

Apart from written texts, other sources of information about language change include descriptive statements, recordings, contemporary dialects, loanwords in English, and contemporary spellings. All of these sources are severely limited in their usefulness. Descriptive statements about English do not appear until late; there are none of any significance prior to the seventeenth century. In addition, it is frequently difficult to interpret these early descriptions and to translate them into modern terminology. Few such early statements were intended to be objective. Their purpose was usually prescriptive, instructing readers in appropriate pronunciation and usage; hence they were biased toward what the author considered elegant speech. Indeed, if such an author says that one must *not* pronounce a word in a certain way, we can be fairly sure that many speakers of the time *were* pronouncing it that way.

Recordings of spoken English date only from the twentieth century. Many of them are less than satisfactory, particularly if the speaker is reading rather than speaking

spontaneously. Also, if speakers know they are being recorded, they usually become self-conscious and even deliberately edit certain usages or pronunciations out of their speech.

The contemporary pronunciation of loanwords from other languages is helpful primarily in dating sound changes in English or the approximate time when the loanword entered English. For example, PDE *dish* and *discus* are both from Latin, but the pronunciation of the final sound in *dish* shows that it is a very early loanword, borrowed before a sound change in which *sk* came to be pronounced like *sh*; *discus*, borrowed much later, was not affected by this change.

Dialectal differences in contemporary English also provide some information about earlier stages of the language. Remoter, more rural dialects often preserve older morphological forms and vocabulary items lost in the standard dialect. Differing pronunciations of the same words also may help the scholar reconstruct earlier stages of the language. For instance, Irish and American English pronounce beet in essentially the same way. However, in American English beat is a homophone of beet, whereas, to American ears, the Irish pronunciation of beat sounds like that of bait. (Compare the pronunciation of the name of the Irish poet Yeats and that of the English poet Keats.) This dialectal difference, combined with the spelling difference of ea and ee, strongly suggests that Irish dialects reflect an earlier stage of English when beat and beet were not homophones.

Because English spelling is so conservative—it has not had a thoroughgoing reform in five hundred years—it has become a museum of the history of the language, and, as such, is helpful in reconstructing earlier stages. Spellings like *sword*, *knee*, *though*, and *dumb* preserve consonants long lost in the spoken language. But museum though English spelling is, it is a museum with poorly labeled contents and even with a fair number of bogus reconstructions, the Piltdown Men of spelling. The "silent" consonants in *island*, *ghost*, and *whole*, for example, are frauds; the *s*, *h*, and *w* in these words never have been pronounced in English. Hence English spelling by itself, without corroborative evidence, is not a reliable source of information.

In the later chapters of this book, as we examine the prehistory and then the history of English, we will see many of the principles introduced here applied to the English language itself. Before we begin discussing the lineage of English, though, we must make a quick excursus into the phonology of Present-Day English and another into the nature of writing systems. These brief digressions will provide a point of reference and a vocabulary of technical terms necessary for understanding the remaining chapters.

SUGGESTED FURTHER REFERENCES²

Aitchison, Jean. Language Change: Progress or Decay? Lively and highly readable.

Anttila, Raimo. An Introduction to Historical and Comparative Linguistics. Advanced introduction.

² Full publication data for the suggested further references in each chapter appear in the General Bibliography.

Arlotto, Anthony. Introduction to Historical Linguistics. Introductory text.

Bynon, Theodora. Historical Linguistics. Another introduction.

Harris, Roy. The Language Makers. Interaction of linguistic theory and culture.

Hock, Hans Henrich. Principles of Historical Linguistics. Comprehensive; many examples.

Hoenigswald, Henry M. Language Change and Linguistic Reconstruction. An older classic.

Jeffers, Robert J., and Ilse Lehiste. *Principles and Methods for Historical Linguistics*. A relatively brief introduction.

Pedersen, Holger. The Discovery of Language: Linguistic Science in the Nineteenth Century. Old, but still useful and readable.

Robins, R. H. A Short History of Linguistics. Brief background up to the 1960s.

Samuels, M. L. Linguistic Evolution: With Special Reference to English. Important and exciting. Yule, George. The Study of Language. General introduction to linguistics.



PHONOLOGY

Language is called the garment of thought: however, it should rather be, language is the flesh-garment, the body, of thought.

-THOMAS CARLYLE

