

1 Introduction: language, languages, and linguistics



KEY TERMS

- Linguistics
- Linguist
- Linguistic structure
- The functional nature of language
- Language versus dialect
- Language change
- Linguistic analysis
- Language endangerment
- Language documentation and conservation
- The fields of linguistics

CHAPTER PREVIEW

Language plays a crucial role in our lives as a functional system of human communication. It is central to our cultures and societies, and has played a significant role in western intellectual history of the study of philosophy, mind, ancient history, and culture. Linguistics is the scientific study of language. This chapter provides an orientation both to language and to the field of linguistics. It introduces the languages of the world, their distribution and demographics, the important issue of language endangerment and death, and the worldwide effort to document and conserve the world's languages. It then provides an orientation to the field of linguistics and an overview of the major subfields of the discipline.

LIST OF AIMS

At the end of this chapter, students should be able to:

- **articulate the importance of language to human lives and society;**
- **discuss the ways in which language is a functional system of human communication;**
- **take an objective, descriptive approach to discussion of language-related issues;**
- **begin to identify fine details of linguistic structure;**

- state basic demographic facts about the world’s languages, including issues of language vitality and endangerment;
- state in what ways linguistics is scientific and objective;
- provide a brief overview of the major subfields of linguistics.

1.1 Language

1.1.1 Language and you; language and us

Language is an essential and ubiquitous component of our lives. To see that this statement is true for yourself, take a moment to think about your day. Cast your mind back to when you first awoke. What were your thoughts and how were they expressed? Trace the day in your mind and try to count how many people you spoke with, even if it was just a quick “hi” or “thank you.” Did you listen to a lecture? Watch television? Talk on the phone? Make an appointment? Sing a song? All of these activities centrally involve language. Now think about what you read today. Perhaps a newspaper, pages on the Internet, e-mail, advertisements, labels, signs, homework assignments? Now move on to thought itself. What thoughts and ideas have passed through your mind? Have you made explicit plans, imagined conversations, debated with yourself? If you are like most people, this brief exercise has revealed that language is both within and around you, a constant part of your internal and external existence. Language is the primary medium which you use to interact with people and institutions in our society. Your particular use of language is also a reflection of who you are as an individual; all of us use language as a means to build and portray our identities in the world around us. We also use language to shape and interpret the great and small experiences of our lives.

Think about the broader world in which we live. Language is the principal means by which societies are constructed and cultures are developed. Think of the size of our society’s great libraries, and how the majority of the volumes in those vast collections (14.6 million volumes in the Harvard University Library alone) are language in its written form. The intellectual achievements of humankind are essentially embodied in language. This is not only true of the written works that formally encapsulate our knowledge, but it is also true of the huge body of indigenous knowledge held by the speakers of thousands of languages across the globe, from the Brazilian Amazon to the Mongolian steppes. Some may argue that music and art are non-linguistic, but note that they often incorporate language, as with lyrics. Even works that do not contain language are interpreted and understood through verbal thought, discussion, and critical analysis. Similarly, mathematics could be argued to be non-linguistic, but again language is used to teach, understand, and interpret it.

Beyond the modern world, consider that language has been used by humans for at least 30,000 years, by thousands of groups across the globe, wherever humans have ventured. Speakers of each generation endow their language with their own unique mark, their own contribution, changing it in myriad subtle ways. As language passes

from generation to generation, it shifts and adapts to the ever-changing world in which it is embedded.

The preceding paragraphs emphasized that **language is a pervasive and essential part both of your own life and of who we are as humankind**. The goal of this book is to begin to address the question: *How does language work?* It is a simple question, and one that most people never think to ask. Language is so automatic – almost like breathing – that most people don’t realize the complexity that underlies it and the subtle and effortless skill with which they wield it.

The question *How does language work?* may itself be simple but the answer is highly complex. It can be broken down into many smaller questions. To begin with, one must ask: *How do individual languages work?* We really can’t understand the nature of language in its broad sense if we don’t understand the mechanisms underlying particular languages, preferably of many and diverse kinds. Other key questions include: What are all the pieces of a language? How do the pieces combine and work together to allow for communication to occur? How are languages learned and transmitted? How do languages influence each other? How do languages change over time? These are but a small number of the many questions that define the field of **linguistics**, the scientific study of language. But before discussing the field in more detail, it is important to continue with our exploration of the nature of language.

1.1.2 Language is human and all that that implies

Language is one of the defining traits of humankind. Language is tied up with our thought processes, our ability to reason, to self-reflect, and to develop advanced civilizations. Other animal species have developed communication systems, but they pale in comparison to human language. A simple illustration of this is the fact that no system of animal communication appears to be able to communicate events that occurred in the past or events that are imaginary. Neither are there animal communication systems that have adverbs or other devices that allow for detailed descriptions of actions. Animals have nothing comparable in scale, complexity, subtlety, or adaptability to human language.

The fact that language is human has a number of important implications for the nature of language. **Language is embedded into our physiology, our cognition, and our thought processes.** Many of the details of linguistic structure are directly dependent on this. For example, the fact that no language makes sounds by curling the tip of the tongue back to touch the uvula (the small appendage hanging down in the middle of the back of the mouth) is directly explainable by the details of human anatomy. Less trivially, anatomical facts are also responsible for a number of features of sound systems, such as the common trend to pronounce a sequence of *t* and *y* as “ch” (e.g., *gotcha* from *got you*). More importantly, language processes are largely resident in the brain and so language shares characteristics with other cognitive functions; for example, language is both learnable and adaptable.

Humans use language for a wide variety of purposes. We communicate everything from urgent warnings to random thoughts, proposals of marriage to complaints. We use it to cajole, threaten, placate, inform, entertain, and command. In other words, **language is functional; it is a tool of human communication**. The fact that language is used for a wide variety of tasks has direct implications for how it is structured. Linguistic structures are flexible and adaptable, able to express all that humans convey to each other in the course of a conversation, a day, a lifetime, a civilization.

Language is also human in that **language is a form of human social behavior**. It can be used to build or break social bonds. It serves as a social cue to the formality or informality of a situation, and to the degree of social intimacy or distance among the people speaking. When children acquire language, they do so by using it as a tool of social interaction within particular social settings. The social component of human language is also reflected in how language is used and structured.

Humans use language to interact, and **using language is an inherently interactional task**. Not only are we listening to our conversational partner and picking up on the many subtleties of word choice, sentence structure, rate of speech, and intonation, we are also constantly assessing when and how to take a turn, and how to communicate our message so that the person to whom we are speaking (the **addressee**) will correctly interpret what we are saying. To take a simple example, I wouldn't say *He is coming for dinner tonight* if I didn't think that the addressee had in mind the person I refer to as *he*. Otherwise, I could use a proper name like *Mike* or a more elaborate phrase like *the guy from across the hall*. I could also start off with an introduction, such as *You know that guy I was telling you about, that owns the cocker spaniels?* All three of these strategies accomplish a similar end of introducing the idea of the person I wish to discuss into the mind of the addressee. Once I am confident that the addressee can identify the correct individual, I can communicate the primary message *He's coming to dinner tonight*. Thus, we see that the interactional component of language is both deep and subtle. The structures of human language reflect our interactional needs.

Humans are creative and **language is structured to take advantage of human creativity**. All languages are constructed in a way that allows for the creation of novel utterances; any language can produce an infinite number of sentences. Therefore we cannot describe a language by simply making a list of all the possible sentences it contains. Instead, our task is to describe the design principles underlying language that make that infinite number of sentences possible. Obvious instances of human creativity with language include word games, puns, and puzzles. Humans also use language creatively when they innovate new expressions, or use one or more words in a new way. For example, the English word *way* has been used for some time to intensify the meaning of certain types of quantifiers (*way too much*, *way more than necessary*) or prepositions (*way up*, *way over*). Younger speakers of some English dialects can now use this intensifier with adjectives; e.g., *way cool*. The use of *way* with adjectives can have specific affective (emotional) implications, e.g., *way unfair*. We don't know who

first used *way* to intensify an adjective, but in doing so that person was performing a creative act, using the word in a new grammatical environment. People do this every day. Most of the time grammatical innovations are not repeated, but sometimes particular innovations catch on. Other speakers hear the innovation and use it themselves, spreading it wave-like across a significant portion of the **speech community**, a group of people who share a common language or dialect and cultural practices. If an innovation continues to spread, it could become a regular feature of the language and constitute a **language change**. Many instances of language change are direct reflections of human creativity.

To summarize, just as language is deeply a part of humankind, the human element is deeply a part of language. The structures of language take the form they do because language is instantiated by the human body, as a tool of human communication, and is embedded in human interaction within societies and cultures. Language is at the core of what it is to be human, and humanity is at the core of language.

1.1.3 Language is dynamic and adaptable

Language is in a constant process of change. The language you speak with your friends today is somewhat different from the way your grandparents spoke to their friends when they were your age. Chances are good that your own grandchildren will probably think that your speech sounds a little old-fashioned. While the difference between grandparents and grandchildren may not be dramatic, over a longer time span, for example, that between oneself and one's grandchildren's grandchildren's grandchildren, the cumulative effect of those generations becomes more noticeable. We can see this in the history of English. Consider the following passage, written by William Shakespeare just over three hundred years ago, and taken from the play *King Henry V*:

Now, fie upon my false French! By mine honour in true English, I love thee, Kate: by which honour I dare not swear thou lovest me; yet my blood begins to flatter me that thou dost, notwithstanding the poor and untempering effect of my visage.

While educated English speakers will be able to understand this passage, children and adults with less formal education will find it difficult. It is easy to identify the linguistic features that mark this as archaic: the use of the old second-person familiar pronouns, *thee* and *thou*; the inflected verb forms *lovest* and *dost*; and the use of now antiquated words and expressions, such as *fie upon* and *visage*. When we look further back, for example at *The Canterbury Tales*, written by Geoffrey Chaucer more than six hundred years ago, the language becomes even harder to decipher. Consider these lines from "The Wife of Bath's Tale":

And if thou kanst nat tellen it anon
Yet shal I yeve thee leve for to gon
A twelf-month and a day to seche and leere

An answee suffisant in this mateere;
And suretee wol I han, er that thou pace,
Thy body for to yelden in this place.

While some of it seems familiar and suggestive of meaning, much is unclear to the eye of the untrained modern English speaker. The passage is easier to decipher if one learns that *yeve* means ‘give,’ *seche and leere* means ‘search and learn,’ *suretee* means ‘certainty,’ and *yelden* means ‘surrender.’ Try providing a modern English translation and compare it with that given in Textbox 1.1.

TEXTBOX 1.1 **MODERN ENGLISH TRANSLATIONS OF *THE CANTERBURY TALES***

Here is one translation of the excerpt from “The Wife of Bath’s Tale,” provided by Librarius at the following URL: www.librarius.com/cantran/wftltrfs.htm:

And if you cannot tell it me anon, then will I give you license to be gone a twelvemonth and a day, to search and learn sufficient answer in this grave concern. And your knight’s word I’ll have, before forth you pace, to yield your body to me in this place.

Of course, you would never speak this way to someone in a conversation today. A more colloquial current translation might be “And if you can’t tell me soon, then I’ll give you permission to be gone for a year and a day, to find the right answer to this important question. I’ll have you promise as a knight, before you leave, that you will give me your life in this place.”

All aspects of language can undergo change. Sounds can enter a language or fall out of use. Sentence structures can shift in interesting ways. Words can develop into prefixes, suffixes, or other small linguistic units. Word meanings can be broadened, narrowed, or otherwise shifted. The social implications of using particular words and phrases can change over time, as can larger patterns, such as how we structure and present information.

Language adapts to the world around it. Think of all the vocabulary you use in daily life that your grandparents did not use when they were your age. The words *e-mail*, *nanotechnology*, *cell phone*, and *Internet* are just a few of the terms that reflect the technological changes that swept over us in the late twentieth century. In the meantime, words like *hogshead* (a large cask or barrel) and *demijohn* (a narrow-necked bottle enclosed in wicker) are not part of the vocabulary of most people living today (although they might persist in certain subgroups of the population). Changes in vocabulary can reflect social changes as well. The English word *spinster*, meaning an unmarried woman past the age of marrying, has vanished from everyday vocabulary in most of modern society, together with the idea that there is an age of marrying and that marriage and family are the primary goals of a woman’s life.

While changes in vocabulary reflecting innovations or social change are probably the most obvious examples of the adaptability of language, languages also undergo adaptations under the influence of **language contact**. When speakers of two distinct languages interact with each other in large numbers over a period of time,

one or both languages generally undergo change. An example of a language affected by language contact is English, which adopted huge numbers of words from French after the Norman invasion. Indeed, in the sentence I just wrote, the words *example*, *adopt*, *huge*, *number*, *French*, *Norman*, and *invasion* all came into English from French!

Language contact can have a much greater effect than simply adding new vocabulary. Sounds, word structures, and sentence structures can also take on qualities of adjacent languages. For example, in the Tibeto-Burman language family (comprising over three hundred related languages distributed over Southeast Asia, Tibet, and the Himalayan region), the majority of languages place the verb at the end of the sentence. A simplified and translated version of a sentence with this word order might be, for example, *John apple ate*. However, there is one group of Tibeto-Burman languages, the Karenic group, which places the verb in the middle of the sentence. Thus, they would say *John ate apple*. Interestingly, speakers of the Karenic languages have been interacting for centuries with the Thai and the Chinese, and both groups speak languages that put the verb in the middle. It is clear that over the centuries, **bilingual** Karenic speakers matched their sentence structures to those of their neighboring languages. Thus, a significant change to Karenic grammar resulted from language contact through the medium of bilingualism. We see that **languages adapt not only to the changing technological world, but also to their broader social environment**.

Language is structured and systematic

When one begins to look closely at language, one is immediately struck by the fact that **regular and recurring patterns form the basis of linguistic structure**. To begin to explore this aspect of language, take a moment to work through the following small exercise on English grammar:

Regular patterning of the English past-tense suffix

In English most verbs have a predictable past-tense form. It is written as *-ed* but has different pronunciations. You can discover this in your own speech very easily. Pronounce the following lists of words and listen closely to the sound at the end of each word:

- List A: *baked, blessed, heaped, puffed, crashed*
- List B: *rubbed, waved, lagged, billed, hummed*
- List C: *waited, faded, booted, coded, righted*

If you are a native English speaker and have a sensitive ear, you will have noticed that the words in List A end in <t>, the words in List B end in <d>, and the words in List C end in <ed>. We can now refer to these as the T-List, the D-List, and the ED-List.

Now try pronouncing the following three nonsense words, again listening carefully to how the suffix is pronounced in each word:

Word 1: *smipped*

Word 2: *croomed*

Word 3: *pluted*

Notice that you don't have to think for an instant which sound to put at the end, but that you automatically end Word 1 with <t>, Word 2 with <d>, and Word 3 with <ed>, even though these are nonsense words which you are unlikely to have ever heard or pronounced before.

Take a minute to examine the consonants that directly precede the suffix (i.e., the "pre-suffixal" consonants) in the T-List words. Now compare the pre-suffixal consonants in the D- and ED-List words. Notice that the lists are distinct; you don't find any of the T-List pre-suffixal consonants in D-List words, etc. Now determine which lists Words 1–3 fall into, based on their pre-suffixal consonants.

You will see that Word 1 has a T-List consonant (p) and the suffix is pronounced as <t>, Word 2 has a D-List consonant (m) and the suffix is pronounced as <d>, and Word 3 has an ED-List consonant (t) and the suffix is pronounced as <ed>. You have discovered a systematic fact of English: the pronunciation of the past-tense suffix depends upon the pre-suffixal consonant. ***Even though Words 1–3 are nonsense words, they still follow the systematic patterns of pronunciation*** that form a significant part of the English language. We can state this pattern as follows:

- (1) In English, the past tense *-ed* will be pronounced: as <t> following the consonants <k, s, p, f, sh>, as <d> following <b, v, d, l, m>, and as <ed> following <t> or <d>.



SIDEBAR 1.1

The statement in (1) is only part of the pattern, as not all possible consonants are exemplified. The lists for two of the groups are actually much larger than shown here. Can you determine which two groups these are?

This is a statement of a pattern or systematic fact of English (sometimes referred to as a rule). One can predict how the past tense *-ed* will be pronounced on any English verb as long as one knows the pre-suffixal consonant (see Sidebar 1.1).

Once we have observed a regular pattern in language, ***we are led to the question of why this pattern should occur***. This question is critical, because it takes us from recognition and description of a pattern to a search for an explanation of the observed facts. In this case, the explanation is physiological,

based on how we produce sounds in our vocal tracts. Since this is a topic covered in the next chapter, we will not go into detail here. The important point is that ***patterns in language can be explained by the role of language as a functional system of human communication***. In this case, the explanation comes from the embedding of language in our human physiologies; in other cases, other aspects of the functional nature of language explain linguistic patterns.

Regular patterns such as this occur in every language many times and at many levels. Some patterns are concerned exclusively with sounds, other patterns are found at other levels, such as word structure or sentence structure. One of the fascinating

aspects of language is the interaction of these patterns, which at times can be quite complex. All the patterns in a language that explicitly involve sounds make up the “sound system” or **phonology** of a language; the patterns which involve word structure make up the **morphology**, while the patterns which involve sentence structure make up the **syntax**. Each of these subsystems of language is independent, but each is also interwoven with the others. In the example above, both the phonology (in this case, which sound is pronounced where) and the morphology (the past tense suffix *-ed*) are involved. The morphology and syntax of a language are together referred to as the language’s **grammar**. For further discussion of the sub-areas examined in linguistic analysis, see Textbox 1.2.

TEXTBOX 1.2 **LINGUISTIC ANALYSIS**

Many examples of systematicity in language will be presented throughout the following chapters. One of the goals of this book is to teach you how to recognize and analyze systematic patterns in a wide variety of languages, that is, how to perform **linguistic analysis**. This requires learning the common – and sometimes the rare – linguistic categories that are found in the languages of the world, the terminology that accompanies those categories, and the theories underlying them. Linguistic analysis requires logical thought, a clear understanding of linguistic concepts, and concise description and argumentation.

Once linguistic structures are accurately described, the analysis is completed by explanation. *The critical question is: what motivates the linguistic structures to be formed in precisely that way?* This question goes to the very core of linguistic theory. The answer will depend crucially upon the particular structure being explained. There are a number of distinct domains that may contribute to it, including meaning (**semantics**), how the structure is used in context (**function**), factors related to history (**language change**), the physical properties of sound (**phonetics**), and the structure of the human brain and how we learn and process knowledge (**neurology, cognition**).

On the other hand, **no language is perfectly systematic**. Although there are sometimes patterns within patterns within patterns, there are often pieces that don’t fit into any regular pattern, but which have idiosyncratic, or irregular, behavior. This is in large part due to language change. The irregularities are leftovers from older patterns that have been obliterated, as new structures emerge and spread through the language.

As an example, consider the English verb *shine*. This verb is a bit irregular as it has two forms of the past tense, *shined* and *shone*. The form *shined* is constructed by adding the regular past-tense suffix to the verb stem and following the rule of past-tense formation we just discovered (*shine* ends in a D-List consonant). The form *shone* is a reflection of an old pattern where past tense was indicated by changing the vowel in a verb’s root. This pattern was inherited from an earlier stage in the language. It has largely died out, but traces of it remain in a handful of verbs, especially those that are used frequently and are therefore resistant to change (for example, *take/took*, *drive/drove*). In the development of English, the marking of past tense by *-ed* gradually spread through the vocabulary, supplanting the older forms. This process has not been completed with the verb *shine*, and both past-tense forms coexist in the modern tongue. Thus, this

irregularity of the language has a historical explanation. *Irregularities in language usually result from language change.*

1.2 Languages

1.2.1 Languages of the world today

Languages are spoken across the globe. People are spread over the earth from the tip of Tierra del Fuego to the Arctic North, and wherever there are people, there are languages. Think for a minute about each of the continents and their communities. How many languages do you think are spoken in the world?

The question is more difficult than it first appears. The truthful answer is that ***we don't have an exact count, although we are able to make an educated guess.*** There are two primary reasons why counting up languages is tricky. One is that ***linguists haven't identified all the languages of the world yet.*** There are still speech (and sign-language) communities that follow their traditional ways of life and who have had little interaction with larger population groups or researchers. The languages of these groups are still undescribed. However, there is also a more fundamental problem in counting up languages, which is that ***it is difficult to decide which speech varieties should be counted as languages and which should be counted as dialects of a single language.***

Let's consider possible criteria for distinguishing languages from dialects. One obvious place to start is **mutual intelligibility**: can the speakers of the two language varieties understand each other? The criterion of mutual intelligibility, taken to its logical conclusion, suggests that if they can understand each other, the two varieties are to be considered dialects of a single language; if they cannot understand each other, the varieties are to be considered distinct languages. One problem with this criterion is that there are often multiple varieties of a language, and while speakers of adjacent varieties can understand each other, speakers of geographically separated varieties have a much harder time. This situation is schematized in Figure 1.1:

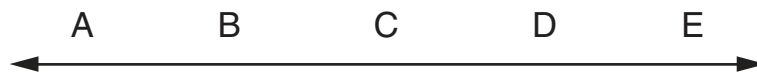


Figure 1.1 Schematization of language varieties

In Figure 1.1, each letter represents speakers of different varieties and the arrow represents geographic distance. While speakers of A might easily understand speakers of B and C, it might take effort to understand speakers of D, and it might be quite difficult to converse with speakers of E. Similarly, speakers of E might have no problem speaking with those of D and C, but might have more difficulty with speakers of A. So, are A and E different languages? If so, where does one draw the dividing line? This situation is known as a **dialect continuum**, and it represents a common situation throughout the world.