Linguistic Anthropology: Components of Language

The Anthropological Study of Language and Language Use

Linguistic anthropologists are trained in cultural anthropology but must also master the finer points of language structure, which is the focus of formal linguistics. In this section, we offer a brief introduction to each of the four key areas of specialization in formal linguistics—phonology, morphology, syntax, and semantics—illustrated by examples of how language is used in Canada. We also examine some of the broader concerns that shape the anthropological study of language and its use.

Linguistic study involves a search for patterns in the way speakers use language; linguists aim to describe these patterns by reducing them to a set of rules called a **grammar**. As Edward Sapir (1921) once commented, however, "all grammars leak" (38). Over time linguists came to recognize a growing number of language components; each new component was an attempt to plug the "leaks" in an earlier grammar, to explain what had previously resisted explanation. The following discussion pinpoints the various leaks linguists have recognized (as well as their attempts to plug the leaks) and demonstrates how culture and language influence each other.

Linguistic anthropologists seek to understand the many ways in which language is learned, expressed, and transformed among groups of people. To do so, they look closely at how people use language in their everyday lives. Thus, their research often involves the use of ethnographic methods (see the "Focus on Four Fields" section on cultural anthropology for more on these methods). Participant observation—a method of data collection in which the researcher lives and works closely with the people whose way of life she or he is studying while participating in their lives as much as possible—can provide keen insight into the ways in which people use language in everyday encounters. Formal and informal interviews can also reveal key aspects of language use while allowing the researcher to ask questions related to interviewees' perceptions of language use in their communities. When interacting with or observing participants, linguistic anthropologists frequently make field notes and use video cameras and digital recorders to document spoken language; recording speech this way allows researchers to go back and look for fine details they may have missed the first time. A stretch of speech on a particular topic that includes multiple sentences or conversational exchanges is ordinarily called *discourse*. Modern technology allows linguistic anthropologists to analyze discourse in fine detail, enriching their understanding of the nuances of language use within a specific culture.

Discourse analysis can help linguistic anthropologists identify not only what is unique about a particular language but also what may be similar across different languages. To be sure, many differences are apparent across languages in terms of individual words and sounds as well as patterns of words and sounds. However, just as anthropologists now recognize that all living human populations belong to a single species that emerged between 100,000 and 200,000 years ago, so it is that linguists and anthropologists agree that all languages spoken by modern human populations are equally sophisticated, and that anything that can be said in one language can be said in any other language, even if only in a more round-about way. Linguists and linguistic anthropologists alike take for granted that:

- all languages have grammar (i.e., they have organizational rules that aid effective communication);
- all spoken languages have consonant sounds and vowel sounds;
- all languages are complex; there is no such thing as a primitive human language; and
- all languages change over time.

Learning a New Language

Have you ever tried to learn a language other than the one(s) you learned at home as a child? What did you find challenging about learning a second (or third, or fourth) language? What similarities did you find between the new language and your original language(s)? Did the process of learning a new language affect how you thought about your native language(s)?

Spoken vs Written Language

Linguistic anthropologists often distinguish between spoken language and written language. Most anthropologists find it likely that spoken language evolved approximately 100,000 years ago as our species, *Homo sapiens*, developed. Written language came much later: there is evidence to support the development of written language around 5000 to 8000 years ago, beginning as a form of symbols used to document various economic transactions.

Spoken language differs from written language in several ways. To begin, spoken language consists of *sounds*, whereas written language consists of *letters* or *characters*. Spoken language tends to come to us more naturally than does written language—after all, as young children, we learn to speak far earlier than we learn to read or to write. Written language is often more difficult to master because it requires closer adherence to the "rules" of grammar, especially when written forms of the language are expected to conform to an explicit standard that is different from everyday speech. Spoken language, on the other hand, often requires less structure because a speaker can rely on gestures and fluctuations in vocal tone to help convey her or his meaning. Linguists and linguistic anthropologists agree that signed languages such as American Sign Language are as fully developed as spoken human languages, even though the rules for signed communication have little in common with the rules of spoken grammar. Both spoken and written forms of any language are closely related, and linguistic anthropologists have often documented the processes by which new written codes have been developed for previously unwritten languages, as a prerequisite to the extension of literacy education by missionaries or colonial authorities, or in the context of national unification.

Linguistic Change

A fundamental characteristic of language is that it changes over time. Part of this change occurs as we incorporate new words and expressions into a language, and as we adapt the meaning of existing words and expressions. Often, new words are imported into one language from another language; when this happens, the word may be adopted in its original form (e.g., *poutine*, adopted from French, meaning "a dish of fried potatoes covered in cheese curds and gravy"), or it may be adapted to fit more naturally into the new language (e.g., when the French word *cinéma* entered the English language, the accent over the *e* was dropped in its spelling, and the pronunciation shifted to incorporate vowel sounds more typical of English than of French). In other cases, new words are invented or coined to describe new technologies or experiences; recent examples include *crowdfund*, *photobomb*, and *smartphone*. Studying how

Analyzing Discourse

Find a partner and have a short (five- to ten-minute) discussion about the things you enjoy doing when you are not at school or at work. Record your conversation. When you have finished, listen to the recorded conversation and transcribe what you and your partner said. Has any of the meaning you understood from your conversation been lost in the transcription? Why? How does the way you used language in your conversation compare to the way you would use language in a letter or a written assignment for class? What adjustments would you need to make to the written version of your conversation to make the meaning clear to another reader?

Thinking about Linguistic Change

How have texting and online forms of communication affected our use of language? Does the use of abbreviations such as LOL, bro, and totes have a place outside of the digital world? Does the use of such abbreviations suggest that we have become linguistically lazy, or are they indicative of some other form of cultural change? How do sitcoms, movies, and other forms of popular entertainment reinforce and spread such usages?
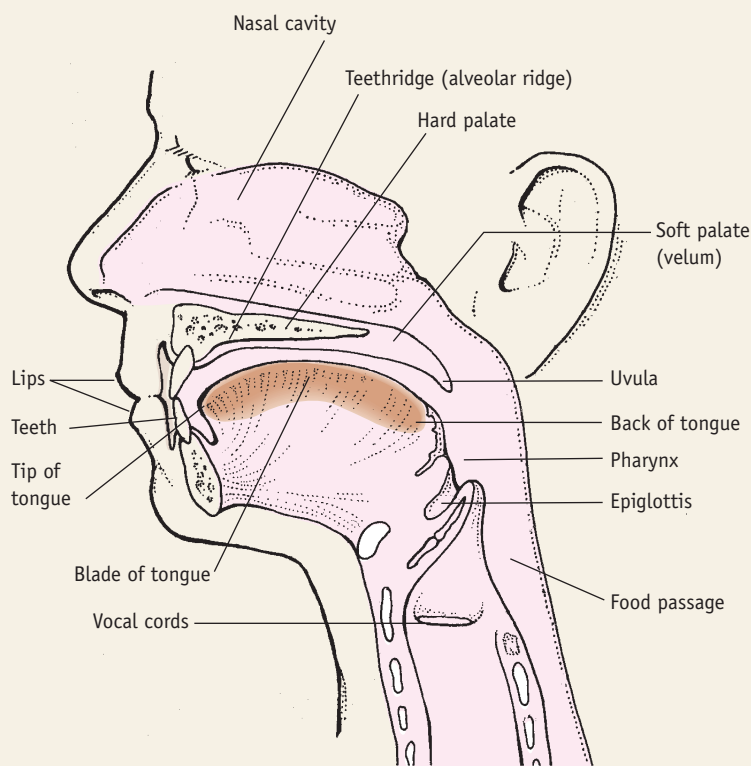
and why new words enter a particular language can give linguistic anthropologists insight into external influences on that language as well as new concerns arising among speakers of that language.

The Formal Study of Language: Phonology, Morphology, Syntax, and Semantics

Phonology: Sounds

The study of the sounds of language is called **phonology**. The sounds of human language are special because they are produced by a set of organs—the speech organs (e.g., the lips, the tongue, the teeth, the uvula, the pharynx, and the vocal cords)—that belong only to the human species (Figure F3.1). The sounds that come out of our mouths are called *phones*, and they vary continuously in acoustic properties. However, speakers of a particular language hear that language's variant phones within a particular range as functionally equivalent sounds

> **phonology** The study of the sounds of language.

Nasal cavity

Teethridge (alveolar ridge)

Hard palate

Soft palate (velum)

Lips

Teeth

Tip of tongue

Blade of tongue

Vocal cords

Uvula

Back of tongue

Pharynx

Epiglottis

Food passage

FIGURE F3.1 | The speech organs.

(e.g. we hear different pronunciations of the word *pecan* as meaning the same thing).

Part of the phonologist's job is to map out possible ways that human beings use speech organs to create the sounds of language. Another part is to examine individual languages to discover the particular sound combinations they contain and the patterns into which those sound combinations are organized. No language makes use of all the many sounds the human speech organs can produce, and no two languages use exactly the same set. American English uses only 38 sounds. Most work in phonology has been done from the perspective of the speaker, who produces, or articulates, the sounds of the language using the speech organs. Although all languages rely on only a handful of what are called *phonemes*—classes of functionally equivalent sounds—no two languages use exactly the same set. Furthermore, different speakers of the same language often differ from one another in the way their phonemes are patterned, producing "accents" which constitute one kind of variety within a language. This variety is not random: the speech sounds characteristic of any particular accent follow a pattern. Speakers with different accents are usually able to understand one another in most circumstances, but their distinctive articulation is a clue to their ethnic, regional, or social class origins.

For example, a native English speaker from Alberta and a native English speaker from Newfoundland would be able to understand each other's speech, but their pronunciation of certain words would reveal their regional origins. A linguistic anthropologist with an ear trained for subtle differences in accents might also be able to narrow down more precisely where each came from (e.g., a major city or a particular rural area), whether either speaker had spent a significant portion of her or his formative years outside of her or his home province (e.g., perhaps the Albertan lived in England for several years as a child), the social class to which each belongs, and/or the highest level of education each likely achieved.

When children first start to learn their native language, they do so by listening to the sounds of the language that is being

Dialects

Note that linguistic anthropologists often use dialects to discern the regional, ethnic, or social class origins of the people with whom they interact. Dialects are more complex than accents, as they involve variants in pronunciation as well as distinctive words (e.g., mang to mean "a mixture" or "to mix or mangle" in Newfoundland English), word forms (e.g., y'all for you all in Southern American English), interpretations of words (e.g., lime to mean "hang out" in Trinidadian English), and grammatical structures (e.g., go to the shops for the milk in Scottish English [Brinton and Arnovick 2011, 462]). To get a sense of how accents and dialects can differ within a language, visit the website of the International Dialects of English Archive (www.dialectsarchive.com) and listen to a few of the audio files available from its collection. Are some accents or dialects more difficult to understand? Why?

Studying the Sounds of Language

Why are linguistic anthropologists interested in phonology? What can they learn from mapping out the possible ways that human beings use their speech organs to create the sounds of language? What can they learn from examining the sounds, sound combinations, and sound patterns specific to a particular language?

Morphology: Word Structure

Morphology is the study of how words are put together, developed as a subfield of linguistics as soon as linguists realized that the rules they had devised to explain sound patterns in language could not explain the structure of words. What is a word? English speakers tend to think of words as the building blocks of sentences and of sentences as strings of words. But words are not all alike: some words (e.g., *book*), cannot be broken down into smaller meaningful elements; others (e.g., *bookworm*) can. The puzzle becomes more complex when we try to translate words from one language into another. Sometimes expressions that require only one word in one language require more than one word in another (e.g., *préciser* in French is *to make precise* in English). Other times, we must deal with languages whose utterances cannot easily be broken down into words at all. Consider the utterance *nikookitepeena* from Shawnee (an Indigenous language spoken in North America that is part of the Algonquian language family), which translates into English as "I dipped his head in the water" (Whorf 1956, 172) (see Table F3.1). Although the Shawnee utterance is composed of parts, the parts do not possess the characteristics we attribute to words in, say, English or French. To make sense of the structure of languages such as Shawnee, anthropological linguists needed a concept that could refer to both words (like those in the English sentence given) and the parts of an utterance that could not be broken down into

morphology In linguistics, the study of the minimal units of meaning in a language.

spoken around them. In time, they come to discern the discreet sounds in the language, and they learn how to reproduce those sounds using their own speech organs. Initially, children tend to learn language sounds from their parents or other caregivers; however, as they develop, they tend to adopt the pronunciation and speech patterns of their peers. The result of this learning process is that a person's speech organs become accustomed to producing the sounds of a specific language, as it is spoken among a particular group of people. For older children and adults, learning to speak a language that makes use of phonemes that are very different from those of their native language can be difficult because producing those phonemes requires their speech organs to move in new ways. An example familiar to many English-speaking Canadians is the rolling *r* sound characteristic of French. Another example comes from the Hawaiian language, which relies on only 13 phonemes (compared to English, which has approximately 36) and which contains a number of complex vowel sounds that are not used in English and, thus, that native English speakers find difficult to pronounce.

TABLE F3.1 | Morphemes of a Shawnee Utterance and Their English Glosses

ni	*kooki*	*tepe*	*en*	*a*
I	immersed in water	point of action at head	by hand action	cause to him

words. This need led to the development of the concept of *morphemes*, traditionally defined as "the minimal units of meaning in a language." The various parts of a Shawnee utterance or an English word can be identified as morphemes. Describing minimal units of meaning as morphemes, and not as words, allows us to compare the morphology of different languages. Morphemic patterning in languages such as Shawnee may seem hopelessly complicated to native English speakers, yet the patterning of morphemes in English is equally complex. Why is it that some morphemes can stand alone as words (e.g., *sing, red*) and others cannot (*-ing, -ed*)? What determines a word boundary in the first place? Words, or the morphemes they contain, represent a fundamental point at which the arbitrary pairing of sound and meaning occurs.

In order to study the morphology of all of the various languages spoken around the world, anthropological linguists need a concept that can refer to both words and the parts of an utterance that cannot be broken down into words. Thus, they rely on the concept of *morphemes*, which are traditionally defined as "the minimal units of meaning in a language." In English, morphemes include units that we would consider to be words (e.g., *sing, red, boy*) as well as units that we would consider to be word affixes (e.g., *anti-, pro-, -ed, -ing, -s*). Breaking down meaningful components of language into their smallest meaning-bearing parts raises an important question: What determines a word boundary in the first place? Words, or the morphemes they contain, represent the fundamental point at which the arbitrary pairing of sound and meaning occurs.

Studying Morphemes

Why are linguistic anthropologists interested in morphology? What is the advantage of focusing on *morphemes* rather than *words*? What can researchers learn by comparing morphemes across different languages? How many morphemes can you find in the following English-language sentence?

Fieldworkers often rely on input from informants when examining local languages and customs.

Syntax: Sentence Structure

A third component of language is **syntax**, or sentence structure. Linguists such as Noam Chomsky began to study syntax when they discovered that morphological rules alone could not account for certain patterns of morpheme use. In languages such as English, for example, rules governing word order cannot explain what is puzzling about the following English sentence: "Smoking grass means trouble". For many native speakers of American English, this sentence exhibits what linguists call *structural ambiguity*. That is, we must ask ourselves what *trouble* means here: is it the act of smoking grass (marijuana) or observing grass (the grass that grows on the prairie) that is giving off smoke? In the first reading, *smoking* is a verb functioning as a noun; in the second, it is a verb functioning as an adjective. We can explain the ambiguity by assuming that a word's role in a sentence depends on sentence structure and not on the structure of the word itself. Thus, sentences can be defined as ordered strings of words, and those words can be classified as parts of speech in terms of the function they fulfill in a sentence. But these two assumptions cannot account for the ambiguity in a sentence such as "the father of the girl and the boy fell into the lake." How many people fell into the lake? Just the father, or the father and the boy? Each reading of the sentence depends on how the words of the sentence are grouped together. Linguists discovered numerous other features of sentence structure that could not be explained in terms of morphology alone, leading to a growth of interest in the study of syntactic patterns in different languages. Although theories of syntax have changed considerably since Chomsky's early work, the recognition that syntax is a key component of human language structure remains central to contemporary linguistics. The study of syntax involves looking at how morphemes are meaningfully combined into longer, more complex units of language—phrases, clauses, and complete sentences. Each language has its own rules about how the placement of words in relation to other words affects their meaning. Typically, these rules are based on the conceptualization of words as fitting into different "parts of speech," each of which has a defined

syntax   The arrangement of words (or morphemes) into sentences.

relationship to other words. In English, for example, words are typically divided by function into eight parts of speech: nouns, which typically identify people or things that are acting or being acted upon; verbs, which typically indicate action; pronouns, which typically stand in for nouns; adjectives, which typically describe nouns or pronouns; adverbs, which typically describe verbs, adjectives, or other adverbs; prepositions, which typically expresses a relationship between a noun or a pronoun and another word; conjunctions, which typically join other words together; and interjections, which typically function independently of other words to express emotion. Which of these categories a word fits into in a given sentence depends on the function it is fulfilling in relation to the words around it.

Semantics: Meaning

For many years linguists avoided **semantics**, the study of meaning, because *meaning* is a highly ambiguous term. What do we mean when we say that a sentence *means* something? We may be talking about what each individual word in the sentence means, or what the sentence as a whole means, or what I mean when I utter the sentence, which may differ from what someone else would mean if she or he uttered the same sentence.

In the 1960s, however, formal semantics took off when Chomsky argued that grammars needed to represent all of the linguistic knowledge in a speaker's head and that word meanings were part of that knowledge. Formal semanticists focused attention on how words are linked to one another within a language, exploring relations such as *synonymy*, or "same meaning" (e.g., *old*

and *aged*); *homophony*, or "same sound, different meaning" (e.g., *would* and *wood*); and *antonymy*, or "opposite meaning" (e.g., *tall* and *short*). They also defined words in terms of *denotation*, or what they referred to in the "real world."

The denotations of such words as *table* or *monkey* seem fairly straightforward, but this is not the case with such words as *truth* or *and*. Moreover, even if we believe a word can be linked to a concrete object in the world, it may still be difficult to decide exactly what the term refers to. (Anthropological linguist Charles Hockett elaborated on this issue in describing the *semanticity* feature of human language). Suppose we decide to find out what *monkey* refers to by visiting the zoo. In one cage we see small animals with grasping hands feeding on fruit. In a second cage are much larger animals that resemble the ones in the first cage in many ways, except that they have no tails. And in a third cage are yet other animals who resemble those in the first two cages except that they are far smaller and use their long tails to swing from the branches of a tree. Which one of these animals are monkeys? To answer this question, the observer must decide which features of similarity or difference are important and which are not. Having made this decision, it is easier to decide whether the animals in the first cage are monkeys and whether the animals in the other cages are monkeys as well.

But such decisions are not easy to come by. Biologists have spent the past 300 years or so attempting to classify all living things on the planet into mutually exclusive categories. To do so, they have had to decide which traits matter out of all the traits that living things exhibit. They have therefore constructed meaning in the face of ambiguity.

Formal linguistics, on the other hand, tries to deal with ambiguity by eliminating it, by "disambiguating" ambiguous utterances. To find a word's "unambiguous" denotation, we might consult a dictionary. According to the *American Heritage Dictionary*, for example, a pig is "any of several mammals of the family *Suidae*, having short legs, cloven hoofs, bristly hair, and a cartilaginous snout used for digging." A formal definition of this sort indirectly relates the word *pig* to other words in English, such as *cow* and *chicken*.

Identifying Syntactic Ambiguity

Read the sentences below and identify any syntactic ambiguities they contain. Can you think of a way to reword each sentence to avoid ambiguity? How might knowing more about the context surrounding the statements help to clarify their meaning? What does this suggest about the importance of context to the interpretation of language?

Running water causes waste.

I waved at the woman with my gloves.

The father of the girl and the boy fell into the lake.

semantics The study of meaning in language.

To complicate the matter, however, words also have *connotations,* additional meanings that derive from the typical contexts in which they are used in everyday speech. In the context of anti-war demonstrations in the 1960s, for example, a *pig* was a police officer. From a denotative point of view, to call police officers *pigs* is to create ambiguity deliberately, to muddle rather than to clarify. It is an example of metaphor, a form of figurative or non-literal language that violates the formal rules of denotation by linking expressions from unrelated semantic domains. Metaphors are used all the time in everyday speech. Does this mean, therefore, that people who use metaphors are talking nonsense? What can it possibly mean to call police officers *pigs*?

We cannot know until we place the statement into some kind of *context*. If we know, for example, that protesters in the 1960s viewed the police as the paid enforcers of racist elites responsible for violence against the poor and that pigs are domesticated animals that are often viewed as fat, greedy, and dirty, then the metaphor "police are pigs" begins to make sense. This interpretation, however, does not reveal the meaning of the metaphor for all time. In a different context, the same metaphor might be used, for example, at distinguish the costumes worn by police offers at a charity function from the costumes of other groups of government functionaries. Our ability to use the same words in different ways (and different words in the same way) is the hallmark of the *openness* feature of language (Hockett 1966), and formal semantics is powerless to contain it. As this example illustrates, much of the referential meaning of language escapes us if we neglect the context of language use.

Thinking about Language and Communication

Consider the relationship between society and language. How does our environment (family, school, hobbies, religion, social media, etc.) influence the way we use language to communicate? In what ways does our interpretation of language depend on our understanding of the social and/or cultural context in which it is being used? To what extent does linguistic communication rely on the sender and the receiver of a message sharing a common frame of reference? How would you describe the meaning of the word red to someone who has never been able to see? Or the meaning of hat trick to someone who has never seen a hockey game? Or the meaning of *double double* to someone who has never tasted coffee?

Key Terms

grammar	morphology	semantics
metaphor	phonology	syntax

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