

Introduction to  
Anthropology:  
Holistic and Applied  
Research on Being  
Human

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## MODULE 12: COMMUNICATION AND LANGUAGE

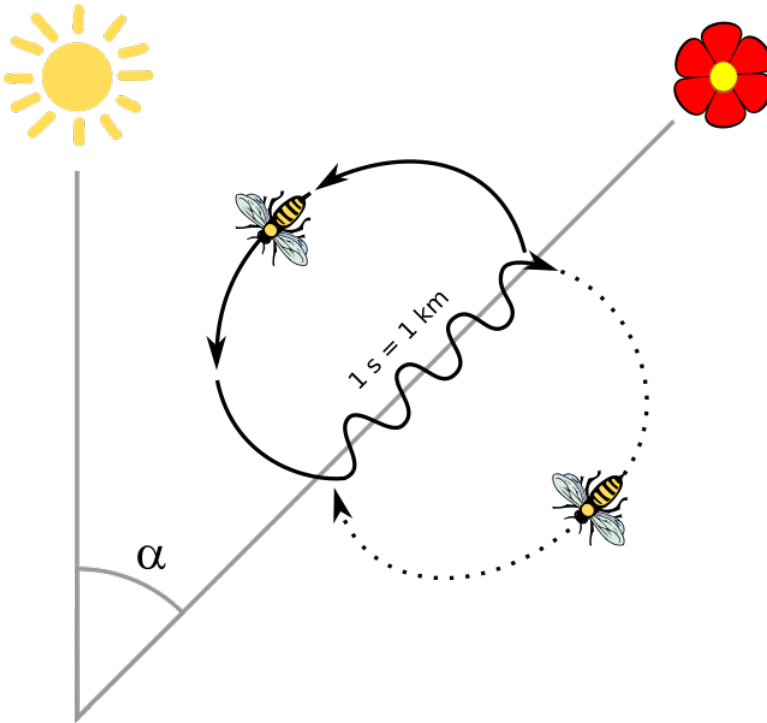
### Language versus Communication

**Language** is a system of complex, abstract symbols that humans use to generate behavior, communicate ideas, and interpret and share experiences. It's how we pass on our knowledge, ideas, and identity from one generation to the next, and like all other aspects of culture, language is learned. The signs and symbols that comprise language are arbitrary. If someone has not been taught those symbols, they will not be able to understand what information is being transmitted because there is no obvious connection between the symbol and object being referenced. As such, language demonstrates higher-order awareness: we can reference people, places, and objects even when they are not physically present. For example, when you read the word "ice cream," you see ice cream in your mind's eye, even if there isn't any around. We can discuss intangible ideas such as nostalgia and abstract concepts such as gravity, even though neither of these words is something we can see, touch, smell, or hear.

No definition of language would be complete without mention of non-verbal communication. Non-verbal communication includes **kinesics** (e.g., movement, gestures, and expression), **proxemics** (e.g., appropriate social distances), and **paralanguage** (e.g., tone, pitch, and volume of language). However, nonverbal communication "speaks" loudly and can

impact communication significantly. For example, your words may be very polite, but a sarcastic tone and crossed arms (and perhaps an eye roll for good measure) indicates that you don't really mean to be polite. In recent years, emoticons have come to be an important form of nonverbal communication; these tiny images, added judiciously to a tweet or social media post, add nuance to a communication and may even replace words entirely.

It is important to differentiate between language and communication. Many non-human species are known to communicate. In fact, if you have a pet, you may know exactly what they are trying to communicate with various vocalizations and body postures. But do they have language? Most people would say no, at least, not in the same way humans use language to communicate present experiences, memories, or future anticipations. Bees have a complex communication system called a “waggle dance” (see Figure 12.1). In this dance, the number and angle of the waggles indicates in which direction food is. This is understood by the other bees who use the information to return to the same food source. Some biologists have suggested that the waggle dance constitutes language because it is communicative, complex, symbolic, and rule-governed (i.e., grammatical). Others have noted that it has the impressive ability to communicate about things that are not “here” or “now.” However, many linguists argue that, while the bee's dance is complex and cognitively impressive, it is genetically governed rather than learned, lacks a true grammar, does not evolve and change like true languages, and—importantly-- only imparts utilitarian information rather than sharing abstract and intangible ideas. In other words, to the best of our knowledge, bees are telling each other where food is, not sharing their experiences or feelings.



**Figure 12.1.** Schematic depicting the waggle dance. Image from Wikimedia Commons.

Another controversial discussion of non-human language is primate communication. For example, Koko, a 300 lbs. female lowland gorilla, was taught by her caregiver, Dr. Penny Patterson, to use over 1,000 different signs in American Sign Language (ASL). Koko, who passed away in 2018, became famous for her enchanting and heartfelt conversational exchanges with Patterson. According to Patterson, Koko could initiate conversations, sign to herself without being prompted, and could combine words into sentences. For example, when asked what she wanted for her 42nd birthday, Koko famously signed “kitten.” Patterson argues that Koko is capable of communicating and sharing experience and feeling, including loving kittens (she had several over her lifetime), intentionally lying to avoid cleaning up, and expressing a longing to be a mother. Other researchers, however, argue that Koko can only do this because she was taught, and that her language, along with other apes who have been taught ASL, lack the grammar and

syntactical abilities of human language. For example, apes may sign sentences in different ways on different occasions rather than following the same grammatical rule in all settings. Moreover, they point out that non-human animals cannot combine sounds into new combinations, nor apply known symbols to novel situations to communicate new, unlearned, meanings. However, other researchers criticize what they call an “anthropocentric” view of language (the view that takes human language as the standard). Because apes don’t have the physical ability to vocalize and form sounds made by humans (hence why Koko was taught sign language), these critics argue that it’s unfair to compare primate language to human language.



### **Video 12.1. Check out the video from PBS News Hour discussing Koko the Gorilla.**

While the jury is still out on whether ape communication systems constitute true language, one thing is clear: language provides the backdrop for abstract, symbolic understanding within different cultures. It allows us to make sense of our world and share it with others in nuanced, abstract, and intangible ways. As such, language is both part of culture but also transcends culture. Indeed, without language, humans would have difficulty transmitting culture from generation to generation. And without culture, humans would lose what makes us uniquely human.

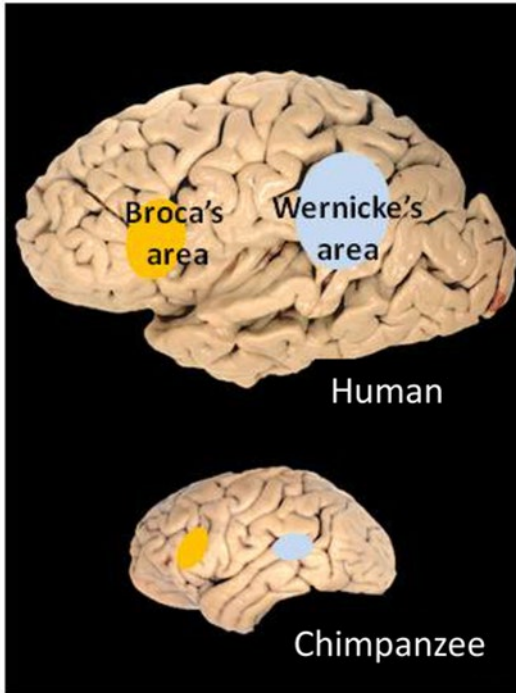
## **The Evolution of Language**

Linguistic anthropologists study the structure of language, its effect on cognition and social interaction, and how languages changes over time. Biological anthropologists are more interested in the origins and evolution of language, which is quite difficult to trace. The **larynx**, colloquially called the “voice box,” is the muscular organ at the top of the neck that allows humans and other mammals to produce sound. Unfortunately for anthropologists, the larynx is composed of soft tissue and does not preserve archaeologically. Furthermore, there are no skeletal traits in the human body that directly correlate with language. Therefore, researchers must find indirect methods to assess the

existence of language in our hominin ancestors.

While the larynx does not preserve, **hyoid bones** associated with the larynx do preserve. These suggest the physical ability of *H. Heidelbergensis* to produce speech possibly as early as 300,000 years ago and definitively by Neanderthals 130,000 years ago. That said, it's important to note that the physical ability to produce speech doesn't necessarily mean that early hominins had the **cognitive ability** to speak. Another indirect line of evidence comes from endocasts. **Endocasts** of the inside of preserved skulls retain the structures within the brain, like a blueprint of the brain's surface. Specific features that can be seen in the brains of modern people and hominins are the **Broca & Wernicke areas**, both located in the left hemisphere and associated with language (see Figure 12.2). Endocasts of *Homo habilis* show the earliest development of these two areas (i.e., more than seen in apes and australopithecines), and endocasts of *Homo erectus* show comparable development to that of modern humans, enough to infer the cognitive ability to speak approximately 500,000 years ago. In modern people, brain injuries to these areas disrupt people's ability to speak. In some cases, people retain the ability to grammatically construct sentences but lose the ability to properly use nouns and verbs. For others, vocabulary is retained, but they cannot put a coherent sentence together.





**Figure 12.2.** Depiction of Broca and Wernicke Areas in human and chimpanzee brains. Image from Wikimedia Commons.

Finally, it has recently been shown that the FOXP2 gene is linked to the embryonic development of areas of the brain associated with language. Although this should not be thought of as a “language gene,” mutations to the FOXP2 gene are now understood to disrupt the ability to control the tongue and repeat word sequences. Interestingly, recent sequencing of the Neanderthal genome has shown that they may have carried an ancestral variant of this genetic mutation prior to modern *Homo sapiens*, suggesting that Neanderthals may have contributed this mutation to modern humans through interbreeding as early as 300,000 years ago.

Although there is some disagreement about the timing and origins of language in humans, most agree that the capacity for language represents the last major step in our biological evolution. Since then, it can be argued that human change has been dominated by cultural rather than biological

evolution, and that all subsequent developments, adaptations, and creativity could not have occurred without the capacity for spoken language.

## The Structure of Language

Linguists study five components of language: sounds (phonology), words (morphology), grammatical sentence structure (syntax), meaning (semantics), and rules governing its appropriate use (pragmatics). All 7,000 languages around the world share these five linguistic attributes, though they vary considerably from one language to another. Indeed, this variation is what makes learning a new language so difficult. You may be wondering what the difference between a linguist and a linguistic *anthropologist* is: there is some overlap, but in general, linguistic anthropologists' interest lies more in the cultural dimensions of language rather than the structure of language itself. Below, we briefly describe each language component, focusing on the cultural implications.

All languages consist of sounds called phonemes, which we learn as infants. These are not the same as letters. Consider the word “the”: “th” is a phoneme; notice that your tongue is behind your top front teeth when you say it. “E” is another; notice here that this sound is coming from your throat. “Th,” is very difficult for non-native speakers to say. Hindi speakers often pronounce it more as a “d.” Similarly, non-native speakers have trouble with the “rolled r” (a Spanish phoneme) and the “!” which is a clicking sound the !Kung San make by popping the tongue against the roof of the mouth. The number of phonemes varies widely among languages. For example, English has 44 phonemes, !Xu (a South African “click” language) has 141 phonemes, and native Hawaiian has 18. This underscores the lack of relationship between a culture’s socio-political complexity and its phonological complexity.



**Video 12.2. Check out the video from PBS’s *The Linguists* presenting the African N/u click language.**

Each language strings phonemes together into meaningful units called

morphemes. Morphemes can be short, containing only a single phoneme (e.g., “s”), or they can be combinations of phonemes to produce what we colloquially call words (e.g., dogs). Bounded morphemes cannot stand alone, such as suffixes and prefixes. In English, s is a bounded morpheme; although it’s not a word, it is a linguistic unit that indicates plurality (e.g., dogs). Similarly, un is a bounded morpheme that means “not” (e.g., unknown). In contrast, free morphemes can stand alone as words (e.g., dog, barks, cute, loud). Further, morphemes may be culturally specific and reflect cultural values. For example, Inuit speakers have many words for ice because it’s important in that region to know the difference between ice that you can stand on, ice you cannot stand on, or ice that make good breathing holes for seals!

Every language also has syntax, or a set of rules for arranging words in the correct order. This is essentially the grammar and punctuation rules for a language. For example, syntax rules determine word order. In English, the subject always comes before the verb: the dog (subject) drank (verb) the water (object). In contrast, in Arabic, the subject comes after the verb. Most languages follow a pattern of verb-subject-object, subject-verb-object, or subject-object-verb but other patterns exist. Object-subject-verb is a rare pattern that occurs in fewer than 1% of the world’s languages. Most Americans will recognize this best exemplified by Star Wars’ Yoda character: “Much to learn, you still have” he famously tells Luke. Anyone who has studied another language knows that syntax can be even more challenging than learning new vocabulary or pronouncing unfamiliar phonemes.

Semantics is the study of the meaning of the symbols, words, phrases, and sentences of a language. Linguistic anthropologists are particularly interested in the meaning of language as it relates to beliefs, concepts, and patterns of thought in different societies. An example of this can be seen in a review of kinship terms. Anthropologists have long recognized that kin relations in other cultures cannot be understood by simply translating them into English. For example, in American kinship terminology, “uncle” can refer to either a mother’s or father’s brother, but in Chinese kinship terminology, a distinction is made between maternal and paternal uncles. In other cultures, like Native Hawaiian, there is no equivalent term for “father;” rather, one term is used to refer to one’s father and all male relatives in the father’s generation. In

addition to terminology, semantics is also concerned with the use of tone and intonation of phrases (prosody). For example, most white English speakers utilize a rise in tone at the end of a yes-no question, such as “Did you do the laundry?” But speakers of African American Vernacular English (AAVE) are more likely to ask the question with a level or falling tone at the end.

Finally, pragmatics refers to social rules for the appropriate use of language within a community. Sociolinguistics note that most rules vary depending on the social context in which they are uttered. For example, in American English in the South, a child is expected to greet an adult or senior as “sir” or “ma’am.” This extends to adults interacting in a formal setting where the person being greeted has greater socio-economic or educational status. Greeting behaviors also vary widely across languages. In many Arabic speaking cultures, a typical greeting is “may the peace of Allah be with you.” In the United States, English speakers often greet each other by asking “How are you?” to which the standard answer is “Fine, thanks. And you?” No one really expects you to tell them if you are not fine, or to elaborate on why you aren’t fine. Those who break this social rule are generally scorned and regarded as socially clueless unless it’s clear that you’re physically unwell. While both the English and Arabic greetings are focused on one’s well-being, Arabic greetings are focused more on one’s spiritual well-being, while the English greetings are focused on one’s physical well-being.

In some cultures, greetings are quite elaborate and embellished. For example, in her ethnography *Dancing Skeletons*, Kathryn Dettwyler describes the greeting behaviors of Bambara speakers in the west African nation of Mali. Dettwyler writes,

“Every time you see someone you know, you go through elaborate greetings involving a series of questions about their health, how their night was (did it pass in peace?), their family, and their work...the higher a person’s status, the longer and more elaborate should be the greetings you give them, out of respect...complete strangers, transacting what most people in the United States would consider an impersonal business exchange, will go through lengthy greetings before getting to the business at hand.”

## Types of Languages

Inevitably, new languages develop as the result of contact between two or more cultures who speak mutually unintelligible languages. A pidgin develops when people speaking multiple languages find shared words and create a simple grammar to communicate. Such a scenario is typical of the colonial era, when trade among unfamiliar groups forced people to find ways of communicating. Pidgins are a simplified means of linguistic communication that are constructed in an impromptu manner with no planning of formal instruction. As such, pidgin is not the native language of any culture but learned as a second language. Few pidgins exist today; an example of a historic pidgin is Tok Pisin, spoken in the highlands of Papua New Guinea, where hundreds of languages are spoken. This English-based pidgin developed between indigenous cultures of New Guinea and Westerners during the colonial era. As the pidgin became more widely used, the children of some speakers learned it as a first language. Gradually, Tok Pisin became a native language with 5-6 million speakers (though not all fluent), and it is an official language of Papua New Guinea.

As more and more children began to learn Tok Pisin, the language became increasingly complex in vocabulary, syntax, and semantics. Many pidgins undergo a similar process over time, eventually evolving into a creole. A creole is like a pidgin in vocabulary, but the grammar and syntax are much more complex and consistent. In addition, a creole is often the mother tongue for many speakers, not simply a lingua franca used during trade. There are over 100 known creole languages. These include Tok Pisin, Swahili, Haitian, and Gullah. The latter two developed between enslaved Africans and Europeans. While many Americans are familiar with Swahili, Haitian, and Jamaican Creole, few are familiar with Gullah. Gullah is still spoken today on the islands off the South Carolina and Georgia coasts by peoples whose West African ancestors were captured and sold into slavery. Their isolation on these islands during enslavement resulted in a rich and nuanced creole still spoken by the Gullah Geechee Nation.



**Video 12.3. Check out the video from Deep South Magazine that presents Gullah-Geechee Roots Run Deep in South Carolina.**

Different than pidgins and creoles, **dialects** are differences in pronunciation, vocabulary, and/or syntax within a single language. These differences are mutually intelligible among sub-groups within a language community, even though they may sound odd, unpleasant, or even wrong to our ears. In the United States, there are myriad dialectal differences in the Southwest, Northwest, Midwest, Northeast, and South. For example, in New England, it's common to drop the *r* from words like *car* (pronounced *cah*) as in the famous phrase “pahk your cah in Hahvahd yahd.” Many folks recognize the Southern drawl as characterized by emphasis on the first syllable (e.g., *juh-y* and *um-brella*) and drawn-out vowels. Dialects vary by geographic location, historic settlement patterns, physical boundaries (e.g., mountains), socio-economic background, generation, ethnicity, and time. For example, communities who have been physically isolated for long periods of time, such as residents of Appalachia, often have strong, distinct dialects; here, it is common to add an *r* to words like *wash* (*warsb*) and *water* (*warter*) and add an “a” to verbs such as “go a-fishin.” Residents of Pittsburgh and surrounding regions are one of the few places in the United States that “smooth” what linguists call the **mouth diphthong**. A diphthong is a vowel that slides from one sound to another as it is spoken, such as in the word *bite* or *down*. If you say these words slowly out loud, you can hear the diphthong slide from one vowel to the next, but in “Pittsburghese,” the vowel is “smoothed” into one sound rather than two. This is how “downtown” came to acquire its iconic pronunciation “dahntahn”.



**Video 12.4. Check out the video from BBC Learning English discussing the diphthong /aʊ/. Watch to the end for a reactionary diphthong.**

When considering dialects, it's important to keep three things in mind. First, while dialects are often derided by non-speakers as lazy, incorrect

English, all dialects consistently adhere to a common vocabulary and strict grammatical rules; it's not a slang usage of "standard" English as this doesn't truly exist. For example, in the AAVE dialect, the sentence "He bin running" may sound like slang for "he is running," but it is more accurately a grammatical construct to denote "he has been running for a long time and still is" (DeCorse and Scupin 2016). Second, communities in places that were settled relatively recently, such as the American west, tend to be characterized by many Americans as "having no accent," but there is really no such thing. It takes time and isolation for regional language patterns to diverge and develop into distinct dialects. Since the west has been settled by English speakers for less time than other regions, less English variation has arisen. Finally, dialects represent cultural identity. Speakers do not use a given dialect because they are unable to speak another dialect or because they are lazy. Rather, speakers proactively work to maintain cultural connections and ties to their heritage through language. This can be seen in the way many dialect speakers codeswitch, or they go back and forth between "standard" English and their cultural dialect depending on the social setting they find themselves in.

## **Language, Thought and Culture**

The Sapir-Whorf hypothesis, named after linguistic anthropologists Edward Sapir and Benjamin Whorf, suggests that there is a relationship between a language and its associated culture, and that the structure of a language affects its speakers' cognition, or world view. In other words, features of language serve as a pair of "goggles," which heighten and dim certain perceptions, thereby helping to determine what we perceive as real and important within a particular culture. The Native American Hopi language (spoken in the southwestern United States before and after European contact) is often held up as a good example of the Sapir-Whorf hypothesis. While living with and studying the Hopi, Benjamin Whorf noticed the Hopi language does not use verb tenses for past, present, and future verb forms. Phrases like "I came" (past), "I am coming" (present), or "I will come" (future) do not have corresponding phrases in Hopi, a phenomenon which Whorf interpreted to mean that Hopi speakers conceptualize time differently than English speakers. English speakers, Whorf hypothesized, visualize time in a quantifiable, linear fashion; they

speak in terms of length of time (e.g., “time flies”), points in time (e.g., “it was the best of times, it was the worst of times), and the ability to spend, save or squander time. Hopi speakers, on the other hand, conceive of time as more subjective and cyclical. Whorf observed that they did not grammatically distinguish between future and past tenses and had no way to count periods of time. Based on these linguistic features, he concluded that the Hopi see time quite differently from Americans. The Sapir-Whorf hypothesis is an example of linguistic relativism because it maintains that different language communities experience the world around them differently.

Today, most linguistic anthropologists reject the Sapir-Whorf hypothesis as overly simplistic, particularly the “strong” version which holds that language determines thought, and that linguistic categories limit and determine cognitive categories. The Hopi do, in fact, distinguish between past and present; Whorf’s poor translations made the Hopi language seem more unusual than it is. Other linguists, however, still see some merit to the idea, particularly a “weaker” version of the hypothesis, which holds that linguistic categories and usage do not determine cognition, but they do influence our thoughts and decisions. For example, close your eyes and point southeast. Even if you were able to do this, you probably had to carefully think it through. This is what cognitive scientist Lera Boroditsky asks her audience to do in her popular 2017 TedTalk. For the aboriginal Australian Kuuk Thaayorre community, this is easy even for a small child. The Kuuk Thaayorre language uses cardinal directions instead of left and right to indicate location and position. As Boroditsky notes, the Kuuk Thaayorre do this for literally everything. The way you say hello in Kuuk Thaayorre is “which way are you going,” to which a proper response is a report of your heading direction. This illustrates nicely that there are significant differences in how humans conceptualize space, and that language encodes much of that knowledge from an early age. Boroditsky summarizes her TedTalk by noting that, “The beauty of linguistic diversity is that it reveals to us just how ingenious and how flexible the human mind is... Human minds have invented not one cognitive universe, but 7,000.”





**Video 12.5. Check out the video from TED presenting Lera Boroditsky discussing how language shapes the way we think.**

Whorf was not necessarily wrong about the effect of names on how people treat things. Anyone in sales knows the difference it makes to call something “vintage” or “pre-loved” rather than outdated and used. The food industry capitalizes on the power of language, too: “dried plums” doesn’t have the same negative connotation as “prunes,” and “low sodium” soups sell better when branded “healthy request.” Boroditsky describes a recent study showing that in languages that randomly assign gender to nouns, its speakers tend to describe those objects in more gendered-associated descriptions. For example, bridge is feminine in German (die Brücke) but masculine in Spanish (el puente). When German speakers are asked to describe a bridge in a picture, they tend to use adjectives such as “elegant” and “beautiful,” which are stereotypically considered feminine in most Western cultures. Spanish speakers, looking at the same image are more likely to use adjectives such as “strong” and “long,” which are stereotypically masculine words. This association between language and gender is a topic actress Mayim Bialik tackles in a 2017 video blog where she points out that calling women “girls” is demeaning. Rarely are men called “boys”, and when they are, it is generally an intentional act to demean or emasculate someone.

A few languages, such as Peruvian Aymara, do not mark the third-person pronoun for sex, thereby bypassing this issue altogether. In Aymara, *jupa* refers to she, he, and they; the relevant contrast is between human and non-human, rather than between male and female as it is in English. One would never admonish a child to be a “nice girl” or “good boy,” but told to behave “like human beings, not animals.” You can read about linguistic anthropologist Sandhya Narayanan’s work with the Aymara. In recent years, research on the ‘weak’ Whorf hypothesis has focused on the speed at which patterns in the environment are perceived by speakers of different languages. For example, in comparison to English speakers, Russian speakers can more quickly distinguish between light and dark blue chips, because Russian has different color names for the two shades of blue, which are both simply ‘blue’ in English.



**Video 12.6. Check out the video from MeshBuzz Magazine that presents Mayim Bialik’s “We have to stop calling women girls.”**

Linguistic profiling is a type of racial profiling based on the sound of a person’s voice and/or dialect. In most cultures, higher status groups tend to impose their language norms on others to reinforce their social status and privilege. Commonly profiled dialects in our country are AAVE (sometimes called Black English or Ebonics), Appalachian English, Latino dialects and more recently “vocal fry.” Dr. John Baugh emphasizes that recognizing cultural or ethnic heritage in someone’s voice is not by itself bad nor does it make the listener racist. It becomes problematic when the listener’s snap judgements about the speaker lead to discrimination and unfair treatment. In one of Baugh’s most notable experiments, he had researchers telephone Los Angeles landlords advertising apartments using three different dialects: African American, Mexican-style Spanish-English, and a Standard English. In the test calls, researchers didn’t offer information about the callers’ credit rating, educational background, job history, or other qualifications; it was a simple inquiry as to whether the apartment was still available. Baugh found racist responses in hundreds of calls: Black and Latino speakers were told more often that the apartment was no longer available, and they were invited to view apartments less. Many times, the person using the ethnic dialect received no returned calls. Not only do such discriminatory practices reinforce the cycle of poverty by precluding equal opportunity in the housing market, but they also break federal and state fair housing and equal employment opportunity laws. Linguistic profiling based on auditory redlining of prospective clientele in the real estate industry ultimately has the effect of keeping neighborhoods “white.”



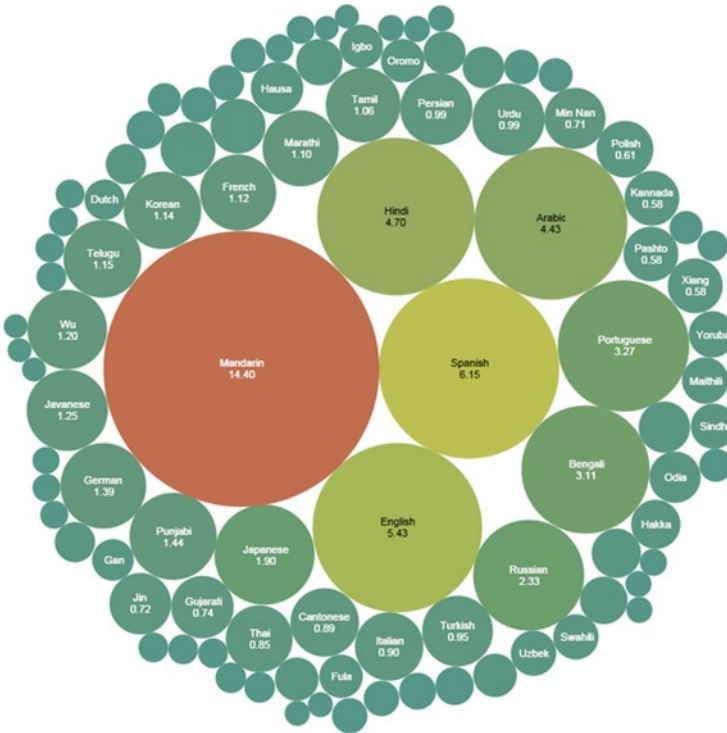
**Video 12.7. Check out the video from TED presenting John Baugh discussing linguistic profiling.**

## Language Change and Extinction



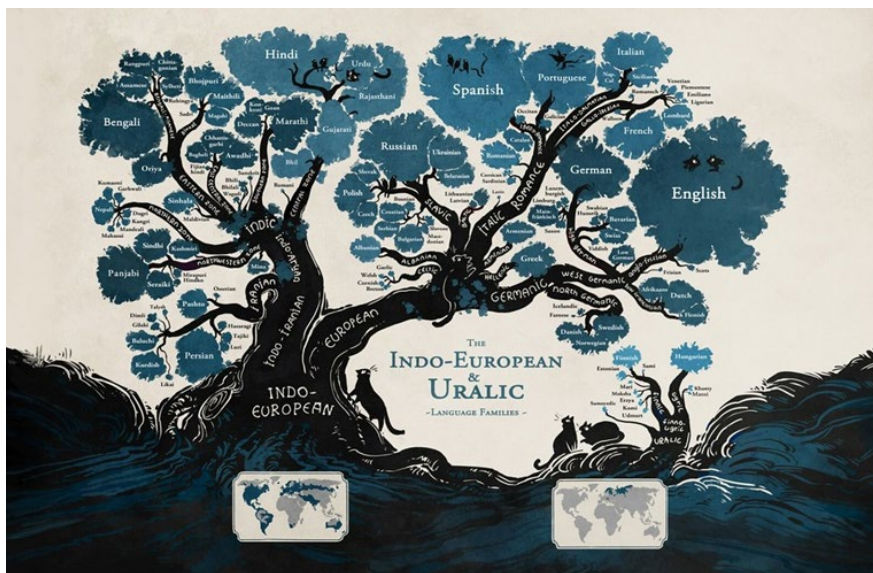
**Video 12.8.** Check out the video from *Lori Labotka discussing the use of language and food narratives in women's prisons.*

There are approximately 7,000 languages spoken in the world today. Figure 12.3 shows a proportional map of the world's languages showing. Notice that English is not as dominate as you might think: Chinese is spoken by the largest number of people on earth (approximately two billion), followed by Spanish (399 million), and English comes in third with 335 million speakers around the world. It is important to recognize that while this map reflects the world's languages as spoken today, it will inevitably change over time. For example, Shakespearean English in the 1600s was quite different sounding than today. Go back to Chaucer's time, when "Middle English" was spoken in the 1300s, and it is barely recognizable. In his 2013 TedTalk, "Texting is Killing Language, JK!" linguist John McWhorter humorously traces educators' ubiquitous lament over the "degradation" of the English language. It is not just the English language. Pointedly, McWhorter reads a quote from AD 63 in which a prominent Roman citizen laments the poor use of "broken" Latin. Ironically, he was writing about what had become French! Language is like a runaway train because it continuously changes, often despite our greatest efforts to stop it. Eventually, languages change so much that they are recognized as new languages.



**Figure 12.3.** Schematic distribution of the world’s languages. Image from Wikimedia Commons.

Figure 12.4 illustrates the family tree of languages. English is more closely related to Dutch, a Germanic language, than French or Spanish, both Romance languages. The Romance and Germanic “parent languages” are derived from the Indo-European proto-language. Language changes for many reasons. Migration and immigration of people bring in new vocabulary words and influence the pronunciation of words already in the lexicon. For example, “Miami English,” which is heavily influenced by Cuban Spanish, is an American dialect characterized by a phoneme linguists call the “dark L,” which you can hear in words like “pull” and “ball.” In contrast, American dialects influenced by Puerto Rican Spanish, such as New York Latino English, often utilize a “light L” in which the L sound is less prominent and heavy such as in words like “leaf” and “like.”



**Figure 12.4.** Schematic of the Indo-European and Uralic languages. Image from Flickr/Wigley.

Another catalyst for language change is the spread of new technologies, which often introduces new words into a language, such as “wifi,” “tweet,” “smartphone,” and “sushi.” Globalization (see Module 11: Culture Change and Globalization) has accelerated such changes as social media and ease of transportation allows people and words to move quickly to new regions of the globe. Acting as a counterbalance to language change are cultural processes that allow languages to resist change. Physical isolation is a common process, such as the isolation of Appalachian cultures until about the 1960s, or the isolation of Gullah speaking cultures on the Sea Islands off the South Carolina Coast. Another good example of isolation is Ocracoke Island, N.C., a small island in the Outer Banks. Due to a shift in shipping patterns in the early nineteenth century that left this island bypassed, and in part due to sympathizing with the northern cause in the Civil War, the island became very isolated from the mainland; today their dialect is mistaken for British or Australian.

More than 7,000 languages have existed throughout history and thousands have become extinct over the millennia. This is a natural outcome

of language change, such as the evolution of Latin into French discussed above. Other times, language loss is a direct result of colonial expansion and imperialism. In western Europe, hundreds of languages disappeared with the expansion of agricultural empires that imposed their language on conquered populations. Many tribal languages, for example, disappeared as the Roman Empire expanded beginning around 500 BC, replacing them with Latin. Similarly, in Central and South America, the rapidly expanding Aztec and Incan Empires resulted in conquered territory, displaced and assimilated populations, and eventual language loss. This process of indigenous language loss was accelerated by colonization of the New World, particularly during what is now known as the boarding-school era. During this time, which lasted between approximately 1880 and 1950 in the United States, Canada, and Australia, children were forcibly removed from their families and tribal land and placed in boarding schools where they were required to speak English, wear Western clothes, and convert to Christianity.

In most regions of the world, languages spoken by hegemonic cultures are systematically replacing smaller tribal languages. Global processes have accelerated this rate of extinction. For example, as younger generations of Pacific Islanders move from rural areas to urban centers, seeking economic opportunity, they often abandon their traditional language to learn the “lingua franca” of the majority language. Media, too, plays a role: as television, newspapers, the internet, and now social media opt to operate using a majority language, increasingly people are abandoning their native language, often leaving only a handful of elders left who speak the language. In South Africa during colonization and Apartheid, for example, indigenous populations of N/u speakers were forced to speak Afrikaans, the language of the Dutch colonizers. As of this writing, there are fewer than ten speakers of N/u.

Today, languages are disappearing at an unprecedented rate: nearly 50% are endangered and 500 are not expected to survive the turn of the century. With every language that dies, much goes with it including scientific, medical, and botanical knowledge and people’s cultural heritage and identity. Research has shown that people forced to abandon their native tongue suffer from low self-esteem, experience high rates of depression and addiction, and are at high risk for suicide.

In response to the rapid loss of indigenous languages due to colonization, imperialism, and globalization, the Endangered Language Project (ELP) was created in 2012. Language loss is often related to oppression and injustice. For these communities, preservation of their language is about the restoration of their cultural identities, values, and heritage. ELP is a partnership between language experts, linguist anthropologists, the National Science Foundation and Google, the latter who oversees the web-based interface that allows users to compile and upload language data. ELP's goals are to promote endangered language research and documentation, and support communities engaged in protecting or revitalizing their languages. Users of the website play an active role in putting their languages online by submitting information or samples in the form of text, audio, or video files. As of 2020, the ELP had catalogued over 3,000 endangered languages comprising 180 countries and/or territories throughout the world.

## **Conclusion**

Arguably, one of the hallmarks of humanity is our use of language. Although all infants are born with the ability to acquire and speak language, they are not programmed to speak a particular language. Just as babies are enculturated to absorb their parents' culture, so too do they learn the language of the culture they are born into and raised in. This includes learning the phonemes, morphemes, syntax, and semantics (including non-verbal communication) of their native language. Although adults can certainly learn a new language, it is most readily accomplished in our early years. Indeed, in many parts of the world, such as the western Europe, Central America, and much of Africa, people routinely learn two or more languages (i.e., bilingualism); the United States is one of the few countries in which most speakers are functionally monolingual. Recently, more and more Americans are beginning to recognize the value of bilingualism and dual-language curriculums and language immersion programs are becoming increasingly popular alternatives in child education. While there is value in having a "lingua franca" to conduct business and facilitate communication in a global economy, it doesn't require the abandonment of native languages. Maintaining one's native tongue has obvious cultural and mental health benefits, but for those who grow up speaking the dominant lingua franca, becoming bilingual in a second (or third) language has additional neurological

benefits. These benefits include increased attention and focus, improved critical thinking and creativity and cognitive flexibility, empathy and the ability to attune to social cues more closely, and protection against cognitive decline and dementia later in life. While some researchers feel more study is necessary to demonstrate significant cognitive benefits to bilingualism, all agreed that there are no negative side effects to learning a second language, and that that skill alone is an impressive part of our linguistic humanity.



## Supplement: Linguistic Anthropology and Me

### **What does a language mean to an individual? What about an entire community?**

Many people can talk about what their language means to them. These statements only scratch the surface of the profound number of ways that language and ways of speaking are so intertwined in our daily lives and in the construction of our identities and sense of selves.

I was interested in looking at indigenous language use through some of my own experiences of growing up as linguistically different than dominant sectors of society. I chose indigenous multilingualism however, because I was also curious about the factors (social, linguistic, and political) that contributed to the maintenance of multilingualism. I grew up in a multilingual home, and in a multilingual community. Most places on earth are also highly multilingual. Yet this multilingualism is often overlooked, especially from the standard western perspective. Additionally, looking at multilingualism was for me an exciting area to explore some of the other issues surrounding indigenous and minority language use and maintenance. Often the typical narratives around indigenous language use or the maintenance of minority languages is one of 'loss', 'death', or 'assimilation', where these communities lose their language and their culture as a result of social pressure and oppression from dominant sectors of society. But what about those communities that have maintained their languages that sustain multilingual practices through today? In the end, I decided to investigate these issues by doing fieldwork on Quechua-Aymara indigenous multilingualism in the Department of Puno, located on the border between Peru and Bolivia, high up in the Andes in South America.

As to be expected however, doing fieldwork on Quechua and Aymara indigenous multilingualism came with its usual challenges. First there was learning both indigenous languages, which I did through conversing with people and making mistakes in every aspect of the language, from pronunciation to basic sentence formation. Then there was getting used to Puno, and especially getting used to living up at high altitudes.

But the most challenging aspect of fieldwork was simply understanding how Quechua and Aymara were spoken alongside Spanish. It was trying to figure out what it meant to be a speaker of Quechua or Aymara, and how those conceptions were changing between older speakers and younger ones. The key to understanding this transition however first lay in unpacking the ways that Quechua-Aymara-Spanish multilingualism was practiced in Puno and identifying some of the effects of long-term language contact. For instance, due to long-term contact, there has been a lot of borrowing and influence across all three languages as they are spoken in Puno. Therefore, all Quechua and Aymara speakers in Puno utilize Spanish words in their everyday speech. Quechua speakers of Puno speak a distinct dialectal variety that is different from other Quechua speaking regions of Peru. This variety furthermore is influenced through contact with Aymara, such as the use of Aymara words in everyday conversation. Similarly, Aymara speakers sometimes mix their Aymara with Quechua in order to communicate with Quechua speakers in public spaces like markets. This mixing between Quechua and Aymara blurs the lines between the languages and indigenous background or identity of the speaker. Yet it was this mixing that many native speakers found to be the most problematic- mostly because such mixing and multilingualism did not conform to dominant ideas about indigenous linguistic “purity” or the separation between indigenous languages and their indigenous, ethnic speaking communities.

Like any study on indigenous languages, there were concerns about the fate of Quechua and Aymara in Puno, as younger speakers are only starting to learn to speak the indigenous languages later in life. But these concerns were also more couched within deeper histories of multilingualism and inter-indigenous contact in the region. Therefore, concerns about speaking Quechua and Aymara in the region were not only about these individual indigenous languages, but also how both languages and their speakers might continue to coexist within Puno. Parents therefore, did not feel comfortable teaching their kids either indigenous language- partially because they wanted their children to learn Spanish first, but also partially out of their own anxieties that they might teach their children ‘wrong’ or ‘incorrect’ versions of either indigenous language. Even though speaking Quechua or Aymara was not as highly valued as learning to speak proper Spanish, or learning a

more global language like English or Portuguese, parents also did not want their children to learn their mixed or “impure” versions of Quechua or Aymara. But these types of decisions also have long-term consequences on the ways that these indigenous languages will be spoken in the future. In the case of Puno, children who do end up learning to speak both these indigenous languages end up learning varieties that are not native to Puno, thus separating themselves linguistically from the varieties and dialects spoken by their parents, grandparents, and other ancestors.

Linguistic anthropology at its most basic is all about the relationship that language has with our culture, society, and history. Yet this relationship becomes more complicated when we consider the linguistic diversity that exists within communities. Questions about loss or language change make more sense in relation to social processes that promote multilingualism and linguistic creativity. As a linguistic anthropologist, I am interested in understanding these relationships and the role that they have played in shaping human society as it is today.

## Review Questions

- **T/F.** The ability to communicate with one another is uniquely human.
- **T/F.** There is a standard set of 26 phonemes that are universally used by all extant language groups in the world.
- **T/F.** Creole languages, historically, are more simplified versions of pidgin languages.
- **T/F.** The words we use to name and describe objects can impact how we view and treat them.
- **T/F.** Globalization is impacting the rate of language extinction as people abandon their traditional language for economic opportunities.

## Discussion Questions

- Take the *New York Times* Dialect Quiz ([How Y'all, Youse and You Guys Talk - The New York Times \(nytimes.com\)](https://www.nytimes.com/2015/01/05/us/dialect-quiz-how-you-talk.html)). Were your results expected or surprising? Think about where you grew up; where your ancestors are from; how often you moved as a kid (e.g., military “brats”?); where, how much and how widely you have traveled; and whether English is your native language or not (and if you learned English, where you learned it).
- When surveyed about the English they find most “correct” or “pleasant,” Americans frequently pick their own dialect region. Why is this? Bucking the trend is the American South—they rank their southern drawl low in correctness, *but* they rate themselves high in “pleasantness.” In other words, they find it appealing even though they believe it’s not proper English. Why might this be?
- The western United States has fewer dialectal and accent differences relative to the rest of the country. If you wish, watch dialect coach Erik Singer’s video (see link below) breaking down American accents. Why does the west exhibit less linguistic variability?
- Have you experienced or witnessed (in real life or TV/film) incidents of linguistic profiling? How did you feel? What was it that you wished the “profiler” knew about who they were profiling that would provide that person with an emic perspective on language? Do you think the profiler spoke another language themselves? Why or why not?

## Activities

1. If you haven't already watched Lena Boroditsky's *TedTalk* "How Language Shapes the Way We Think," try this: close your eyes and point to the southeast. Try doing it with a group of people from your own culture. Open your eyes and see how many different directions people are pointing. Then, watch Boroditsky's *TedTalk* to see why Americans are so bad at this, but even a toddler among the Kuuk Thaayorre can do it easily.
2. To reveal your personal dialect map, take the *New York Times* 2013 "Dialect Quiz" at [https://www.nytimes.com/interactive/2014/upshot/dialect-quiz-map.html?\\_r=0](https://www.nytimes.com/interactive/2014/upshot/dialect-quiz-map.html?_r=0). What does the way you speak say about where you're from? Were you surprised by where the quiz placed you geographically? If not, you probably grew up in that region. If you were surprised, think about what may cause the discrepancy between where you live and your non-local dialect. Think about where you grew up, where your ancestors and extended family are from, how often (and where) you moved as a kid, how much you've traveled, and whether English is your native language or not. You might also consider historical migration patterns, such as the westward expansion of settlers in the United States in the mid nineteenth and early twentieth centuries, and migrations of former enslaved populations after the Civil War, and again in the 1940s and '50s.
3. Word Weaving (from M. Wesch's *The Art of Being Human*): Step 1: Invent a word, phrase such as "strengthness" or "earball," or perhaps invent a new metaphor about arguments, education, or the self (e.g., "falling exhausted" or "nerdification"). What about love? Maybe we could use a different word to describe our complex feelings. Or maybe we could re-imagine metaphors like "falling in love." Anything goes. Step 2: Introduce the word, phrase, or metaphor in basic conversation as if the word has always existed and see if your friends catch on and start using it themselves. Step 3: If they ask about it, give them a strong pitch as to why it should exist. Step 4: Describe your linguistic adventure and see other's adventures, by posting a video or story with #anth101challenge4.

4. BaFa BaFa Cross-Cultural Simulation: If you are an instructor, we highly recommend this cross-cultural simulation originally developed by the US Navy. The exercise came about as an answer to incidents and misunderstandings between American sailors and foreign citizens of host countries. This unique workshop simulation creates a society where participants get to experience the power of culture, language, and values in a short amount of time. Over the course of the activity (reserve a class period of at least 50 minutes), students explore how their cultural and linguistic biases affect cultural perception, and in doing so, learn about themselves, their communities and each other. The first-hand nature of this exercise helps drive home themes such as cultural perception, cultural polarization, and sensitivity in intercultural communication. For more information, go to <https://www.indstate.edu/student-affairs/msp/programs/bafa-bafa> and <https://www.simulationtrainingsystems.com/schools-and-charities/products/bafa-bafa/>.

## Key Terms

**African American Vernacular English (AAVE):** A dialect of American English, sometimes called Black English or Ebonics, spoken by African Americans and characterized by pronunciations, syntactic structures, and vocabulary; exhibits a wide variety and range of forms that vary in relation to Standard American English.

**Afrikaans:** A language in South Africa, derived from Dutch colonizers.

**Broca area:** The motor speech area of the brain associated with speech production and articulation, located in the left hemisphere.

**Codeswitch:** Alternating between two or more languages, or varieties of language, depending on the social setting one finds themselves in while conversing.

**Cognitive ability:** The general mental capability involving reasoning, thought processing speeds, abstract thinking, problem solving, complex idea comprehension, and learning from experience.

**Communication:** The act of transferring or exchanging information.

**Creole:** A language which develops from a pidgin as two languages merge together to create a new one, coming into existence at a precise point in time and becoming nativized by children as their first language.

**Dialect:** A linguistic pattern consisting of differences in pronunciation, vocabulary, and/or syntax that occur within a common language family.

**Endangered Language Project (ELP):** Created in 2012 to promote endangered language research, documentation, and preservation, and to support communities engaged in protecting or revitalizing their languages. The ELP is a partnership between language experts, linguist anthropologists, the National Science Foundation and Google, the latter who oversees the web-based interface that allows users to compile and upload language data.

**Endocast:** Casts of the interior of preserved skulls, either natural or manmade, that provide replicas of the surface of the brain.

**FOXP2 gene:** Provides instructions for making a protein called forkhead box P2 and is linked to the embryonic development of areas of the brain associated with language. Not thought of as a “language gene”, but



mutations to the FOXP2 gene are now known to disrupt the ability to use control the tongue and repeat word sequences.

**Gullah:** A creole language still spoken today by the Gullah Geechee Nation on the islands off the South Carolina and Georgia coasts, by peoples whose West African ancestors were captured and sold into slavery.

**Kinesics:** The study of the way in which certain body movements and gestures (e.g., hand gestures, winking, nodding) serve as a form of nonverbal communication.

**Hyoid bone:** The U-shaped bone situated at the root of the tongue in the front of the neck and between the mandible (lower jaw) and the largest cartilage of the larynx (voice box). The primary function of the hyoid bone is to serve as an attachment structure for the muscles of the tongue, the larynx, mandible, and other structures in the mouth and throat.

**Language:** A system of symbols with standard meanings conveyed by speech, writing, or gestures, through which members of a society use to communicate with one another.

**Larynx:** Also known as the “voice box”, the larynx is the muscular organ at the top of the neck that allows humans and other mammals to produce sound.

**Lingua Franca:** The language adopted as a common language for communication between speakers whose native languages are different.

**Linguistic profiling:** Characterizing a person based on their speech (e.g., voice, dialect, accent) and/or writing.

**Linguistic relativism:** The perspective that every language is a unique system of relations and that the structure of language influences the way its speakers conceptualize the world. More radically, phonological, grammatical, and semantic distinctions in different languages are completely arbitrary. (See **Sapir-Whorf hypothesis**).

**Morpheme:** The smallest units of a language that can convey meaning.

**Mouth diphthong:** A vowel that sounds like a combination of two other vowels as a speaker’s tongue changes position and slides from one sound to the next.

**Paralanguage:** The technical term for voice cues, such as groans, pitch, accent, intonation, etc., which accompany spoken words.

**Phoneme:** A basic unit of sound that distinguishes meaning in a language.

**Pidgin:** A simplified form of language developed when people not sharing a common language find shared words and create a simple grammar to communicate.

**Pragmatics:** The rules for using the appropriate language within a particular speech community.

**Prosody:** The study of the patterns of stress, rhythm, and intonation in a language.

**Proto-language:** The parent language for many ancient and modern languages.

**Proxemics:** The study of how people unconsciously structure the space around them and distance between them.

**Semantics:** The meaning of words, phrases, and sentences of a language.

**Sociolinguistics:** The study of pragmatics and language use in various social settings to discern the links between language and social behavior.

**Syntax:** The rules in languages for phrase and sentence construction, in order to arrange words in the grammatically correct order.

**Sapir-Whorf hypothesis:** Two linguistic anthropologists, Edward Sapir, who first advanced the hypothesis, and Benjamin Whorf, who subsequently developed the hypothesis, suggest there is a relationship between the characteristics of a language and its associated culture; that the structure of a language affects its speakers' cognition, or world view, and their perception and categorization of experience.

**Tok Pisin:** An English-based historic pidgin language that still exists today, spoken in the highlands of Papua New Guinea, an island nation comprised of hundreds of languages. Tok Pisin was developed between indigenous cultures of New Guinea and westerners during the colonial era.

**Waggle dance:** A complex communication system performed by bees where the length and angle of the waggles indicates the direction and distance to a food source.

**Wernicke area:** The critical language region of the brain that controls motor neurons involved in the comprehension of speech, located in the left hemisphere.

## Suggested Readings

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