1 Language Acquisition

1.1 Chapter Introduction

What is language? How do children learn their first language? The answers to these complex questions serve as a starting point in exploring second language (L2) teaching and learning throughout this book. We begin by introducing some components of language, such as grammar, vocabulary, pronunciation, and pragmatics. After investigating these language components, the chapter addresses language learning during the first years of a child's life. As such, it focuses mostly on first language (L1) development; however, it also examines what happens when children are exposed to more than one language early in life. An important milestone for language learning is when children start receiving formal education, which is usually about age 5 or 6. Before going to school, children learn language almost exclusively naturalistically, which is to say without any formal instruction. Typically, very little is done to systematically teach language to infants and toddlers. *How are children able to learn a language without formal instruction?* To help answer this question, we explore several theories of L1 acquisition. By the end of this chapter, you should have a better understanding of how we acquire our L1.

1.2 Pre-Reading Activities

1. Discussion questions:
   a. What is a language? What do people do with it? How important is it for your life?
   b. What additional information can you add to describe the components of language mentioned in the introduction (i.e., grammar, vocabulary, pronunciation, and pragmatics)?
   c. We know that American and British English are not identical, but how are they different? What about other varieties of English such as those spoken in India, Jamaica, or Kenya? In addition to the linguistic differences, are there differences in how different varieties are viewed? Are some viewed more positively than others? Why do you think there are different views on different varieties?

d. Do you consider yourself bilingual or multilingual? If so, why? If not, why not?
e. Do you believe there is an age when people lose the ability to learn a language? Why or why not?
f. Babies learn their language without being taught, just like they learn how to walk without being taught. Over time, they fully master the rules of their L1. How do you think this happens? By imitating what they hear? What do babies need in order to learn their L1?

2. Have you heard an L1-English child say *go-ed* to express the past tense of *go*? How about *sheeps* for more than one sheep? How about *What he did?* Children don't hear these forms from adult speakers, so why do they produce them? Can you think of more examples of children's language use that differs from how adults use the language? You can give examples in your L1.
3. The following ten statements express beliefs by nonlinguists about L1 learning. Which ones do you agree with? Why? Which ones do you disagree with? Why? Write down your answers (YES or NO) on this book. Please make notes of your answers because we'll revisit them at the end of this book.
   a. Learning your L1 is relatively easy because at this age your brain is like a sponge, absorbing anything and everything.
   b. L1 learning is a process of mimicking with reinforcement and corrections of proper and improper utterances.
   c. Choosing what to say around children is very important because one wrong word or phrase can be something that your child will be saying for all their lives and that is a hard thing to correct later.
   d. Children are born with the innate ability to start acquiring language through immersion of that language.
   e. Family members, specifically guardians, play a critical role in that immersion process that helps children begin to learn a language before they can speak.
   f. An L1 is learned through repetition.
   g. L1 acquisition is both a conscious and unconscious process.
   h. L1 learning is a process that can only happen in early stages of life.
   i. Input is the most important part of the L1 learning process.
   j. When learning an L1, you need to focus on grammar, vocabulary, and conversational phrases.

1.3 What Is Language?

Everyone knows at least one language, unless they have severe cognitive or developmental disabilities. For most of us, the **L1** we learned was spoken; however, deaf children learn sign language, which is also a language, just not spoken. Most of us also learned to read and write our L1. However, not everyone learns to read or write their L1, depending on the education they receive. But in all cases, language is one characteristic that separates humans from other animals; no other species has such a developed linguistic ability, and the fact that humans acquire their L1 without even really trying is amazing! In this sense, L1 learning is different

from learning other types of information like science, history, or mathematics. We typically need to be explicitly taught those subjects, and we need to make an effort to learn them.

Meanwhile, for some people, it's clear what their L1 is because they're **monolingual** and speak only one language. In some cases, these people might start studying an L2 later in school, but by that time their L1 is fully developed. For example, in the USA and the UK, many children learn English as their L1. L1 learners, by definition, always reach full proficiency in their L1. As such, they are often called **native speakers**. However, many applied linguists prefer not to use this term because of the superiority and exclusivity that it connotes. Instead, researchers often use "L1 speakers," which is the term we'll use throughout this book unless the concept of nativeness is important to a specific theory or perspective. Thus, an L1 speaker is generally an individual who learned the language from birth and achieved mastery of that language, meaning that they speak the language in a way that is indistinguishable from other speakers who also learned the same language from birth.

In contrast to individuals who have a clear L1 because they haven't learned an additional language, or they learned one later in life, other people have a harder time identifying their L1 because they've been exposed to two or more languages during their early years of life, and these multiple languages developed simultaneously. Such individuals can be referred to as **bilinguals** or **multilinguals**. However, there are other types of bilinguals, which we will discuss later in this chapter. Before delving deeper into language learning, we first need to make sure that we have a good idea of what language is.

So far, we've been discussing language acquisition as if we know what language is. In many ways we do, because we all know at least one. However, in order to make sense of the rest of this book, we need to explore this very basic question, *What is language?*, so that we understand how languages are learned. There are different perspectives on the nature of language, but many people would agree that language is a primary way that humans express themselves and communicate with others. Language also separates humans from other animals, even though some animals can be taught some basics of human language and they also have other ways of communicating among themselves. But no other animal has a complex, systematically structured tool for communication.

1.3.1 Components of Language

Language can be divided into different components, which are helpful when speaking about language acquisition. In lay person's terms, we can refer to grammar, vocabulary, and pronunciation as three of the primary components of language. Linguists use more technical terms: morphosyntax for grammar, lexis/lexical for vocabulary, and phonology for pronunciation. There are some lesser-known components as well, such as pragmatics and discourse. We'll explore these in turn.

1.3.1.1 Grammar

Grammar has received considerable attention in L1 acquisition research because it provides insight into human cognition and the brain. Grammar is often what many people think of when they think about language. Grammar, or morphosyntax, refers to the patterns that

recur in language at the word and sentence levels. Morphosyntax is divided into **morphology** and **syntax**. Morphology consists of grammar at the word level (i.e., things that are used to make words), while syntax refers to grammar at the sentence level (i.e., things that are used to make sentences).

An important construct within morphology is the **morpheme**, which is the smallest unit of meaning in a language. Some morphemes can stand by themselves and are called **free morphemes**. These are what we typically think of as words. For example, *word*, *love*, and *learn* are all free morphemes: they are meaningful units on their own and they can't be broken down into smaller parts with a similar meaning. For example, *ord* and *lov* aren't English words, and while *learn* can be reduced to *earn*, the meanings of the two words are unrelated. Thus, *earn* and *learn* are considered two different free morphemes.

A **bound morpheme** is another type of morpheme that can't stand alone; rather, it must be connected to a free morpheme. For example, if we take the previously mentioned free morphemes, we can add additional meaningful units to them. *Word* can take the bound morpheme *-s*, which has the meaning of plural, to form *words*, which means more than one word. So, *words* consists of two morphemes, *word* (free morpheme) + *-s* (bound morpheme). Another example is *love* + *-ed* to form *loved*. The morpheme *-ed* indicates that something occurred in the past, but *-ed* cannot stand by itself. Bound morphemes can be inflectional or derivational in nature. Inflectional morphemes don't change the classification of a word, so if we add *-s* to the verb *read*, we get *reads*, which is still a verb. In contrast, derivational morphemes change the type of word that they're attached to. For example, if we add *-er* to the verb *read*, we get *reader* which is a noun.

The other component of morphosyntax is syntax, which is concerned with how sentences are formed. Question formation is a good example of a syntactic structure in English because in order to form a question, parts of the sentence shift place. In response to the sentence *I wrote an essay*, we can ask *What did you write?*, in which case the object of the sentence, *essay*, is replaced by a question word, *what*, and moved to the front of the sentence. To complicate matters, in English, we also have to add an auxiliary verb, such as *did*. Some languages don't move the question word to the front of the sentence; rather, they put it in the place of the object they want to know about. In some instances, we can do the same thing in English – *You wrote what?* – but such questions occur in more informal and often spoken language. We'll talk more about other aspects of grammar and grammar learning in Chapter 5.

1.3.1.2 Vocabulary

Vocabulary, which is also referred to as lexis by researchers, is one of the most important parts of language. It is arguably impossible to use language to communicate without knowing which words are needed to express a person's intended meaning. But what is a word? At first glance, the answer to this question seems easy. We all know what words are; we use them every day. However, when we dig beyond the surface, the answers become more complex. First, we need to learn some words that are used to talk about words. Three important ones are **tokens**, **types**, and **word family**. A token is every word in a text or utterance, regardless of whether it's the same as other words in the text. This is the meaning of *word* that students intend when they ask their instructor how many words an assignment needs

to be. If an assignment is supposed to be 2,000 words long, it means that each word on the page will count equally regardless of whether they're the same or not. If we count the tokens in the following sentence, we come up with eight, because *is* counts twice: *Shawn is a writer and so is Masatoshi*.

However, when we want to talk about learning vocabulary, it's clear that learners don't need to learn *is* twice in order to understand the example sentence. Thus, we also talk about word types, which refers to every different word in a text or utterance. The previous example sentence has seven types, with the two tokens of *is* counting as only one type. But once again, when it comes to learning vocabulary, we have the sense that even if words are not exactly the same, some of them are more related than others. For example, if an L2-English learner knows the word *write*, it will be easier for them to recognize the words *writing*, *writes*, and *writer*, because the different forms of *write* have a related meaning; however, learning the word *speak* will take more effort regardless of whether the person knows *write*, because *speak* and *write* are unrelated words. To reflect this phenomenon, vocabulary researchers talk about word families, which refers to a head word and its related words. A head word is the primary word that the other words in the family are based on. Head words are free morphemes, and the related words generally have bound morphemes attached. Thus, *write* is a free morpheme, while *writing*, *writes*, and *writer* have bound morphemes, *-ing*, *-s*, and *-er*, attached that change the meaning or grammatical function slightly. It's not always clear how closely words need to be related to each other to be in the same family. However, when researchers talk about learning a word, they usually mean the head word and its word family. Now that we know the concept of a word family, note that *word family* is generally what we mean when we use *word* throughout this book, unless otherwise specified.

One other important aspect of vocabulary is **form–meaning mapping**, which means that speakers of a language attach a specific meaning to a specific spoken or written word. At their most basic, form–meaning mappings are mostly arbitrary. There's no inherent reason why a furry, four-legged animal should be called *dog* in English, *inu* in Japanese, or *pies* in Polish; however, conventionally, speakers of those languages have assigned that meaning to those forms. We'll talk more about other aspects of vocabulary and vocabulary learning in Chapter 6.

1.3.1.3 Pronunciation

Pronunciation, also referred to as phonology, involves the ability to perceive and produce the sounds of language. Pronunciation is often thought to be composed of two different things. First, **segmentals** are the individual sounds in a language, which are sometimes called **phonemes**. A phoneme is a sound that differentiates one word from another in a language. Phoneme is tied to the idea of **minimal pairs**. If only one sound in a word is changed and the change makes a different word, then the two words are a minimal pair. For example, the first sounds in *rake* and *take* are phonemes because changing them changes the meaning of the word. In Spanish, the flapped versus trilled *r* are two different phonemes, making a difference between *pero* ("but") and *perro* ("dog"). However, in English, these sounds aren't different phonemes. A person could start the word *rake* with either an English *r*, a Spanish flapped *r*, or a trilled *r*, and most L1-English speakers would perceive it as the same word.

In common terms, phonemes can be divided into consonants and vowels. The production of consonants involves a stop or constriction of airflow by the speaker. Different consonants are made by speakers using their lips, teeth, and/or tongue to affect the airflow. Vowels are the other component of segmentals, and these are sounds for which the air moves unobstructed through the mouth while the speaker vibrates their vocal cords. The vowel sound is determined by, among other things, the position of the tongue, the shape of the lips, and the size of the mouth opening. Now, produce the following sounds and see how you are using your vocal cords, lips, and tongue: /t/, /o/, /f/, /i/.

Vowels and consonants are typically what people think of when they think of pronunciation, but there is another component that is also important, and that is **suprasegmentals**, which are comprised of elements like stress, pitch, accent, and prosody. In other words, suprasegmentals have to do with how sound works when segmentals are joined together in a word or sentence. For example, stress is important in English. Some words, such as *record*, can have different meanings depending on which syllable is stressed. So, the sentence *Pat is going to reCORD a REcord* has two words that contain basically the same segmentals, but putting stress on either the first or second syllable changes the meaning. (It should be noted that English vowels also change a bit depending on stress, but such details are beyond the scope of this book.) At the sentence level, English speakers can use stress to highlight different pieces of information. For example, take the sentence *I'm walking to the store*. If we stress the first word, *I'M walking to the store*, it emphasizes who is going to the store. If we stress the second word, *I'm WALKING to the store*, it highlights the action that is taking place; for instance, I'm walking instead of driving. If we stress the final word, *I'm walking to the STORE*, it answers the question *Where are you going?* Typically, in English we don't stress definite articles, but if someone said *I'm walking to THE store*, they might be trying to emphasize a specific store.

Pitch or tone is another suprasegmental category that is especially important in tonal languages. For example, Chinese is a tonal language with four main tone contours. One tone starts high and stays high, one is a falling tone, one is a rising tone, and one falls and then rises. Chinese has words that consist of the same segmentals, but depending on the tone, they are different words. For instance, the segmental combination *ma* can mean *mother*, *hemp*, *horse*, or *to scold* depending on the tone. In contrast to Chinese and other tonal languages, English doesn't use pitch or tone very much, although there are a few cases. One is for making a sentence declarative or interrogative. Take a sentence such as *You're the best student in the class*. If the sentence is said with a falling intonation on the last word, it makes it a statement. However, if the final intonation is changed to a rising tone, it makes the sentence a question, without having to change the syntax: *You're the best student in the class?* We'll talk more about these and other aspects of pronunciation and pronunciation learning in Chapter 7.

1.3.1.4 Pragmatics

One component of language that is less commonly known compared to the previous ones is pragmatics. What is pragmatics? To put it quite simply, it's how language is used in different social contexts. One way to think about pragmatics is to think about what language or ways

of speaking would be considered polite or rude in different contexts. Do you speak to your parents in the same way that you talk to your friends? When you make a request, do you use the same phrases for both your siblings and professors? These questions and your responses provide examples of the pragmatics of a language.

Pragmatics is an aspect of language that many people might not be explicitly aware of. And yet, pragmatics is an important component of language and communication, and indeed, a lack of appropriate pragmatics proficiency might have real-world consequences. If an L2 speaker makes a grammar or vocabulary mistake, there might be a communication problem, or their interlocutor might just overlook the error because they realize they are speaking with an L2 speaker. However, if an L2 speaker violates a pragmatic norm, their interlocutor might not realize that it's because they don't know all the target language rules. Rather, the individual might think that the L2 speaker is rude or inappropriate, and they might not continue to interact positively with the L2 speaker.

Pragmatics is divided into two components: **pragmalinguistics** and **sociopragmatics**. Pragmalinguistics refers to the linguistic structures that are used to encode politeness. For example, languages such as Japanese and Korean attach morphological forms to words to signify social hierarchy. The base form of *to eat* is *taberu* in Japanese, which can be used to communicate with someone who is at a comparable social status; however, you need to add *-masu*, to form *tabemasu*, when communicating with someone who has higher social status, otherwise you'll be viewed as a rude person. These morphemes, referred to as honorifics, are important for polite communication, and learning these forms is something that learners need to do. English doesn't have many morphological pragmalinguistic features. Instead, English speakers often use vocabulary or syntax to express things in a socially acceptable way. For example, when making a request in English, there are several ways to make it more or less polite. Adding the word *please* is one example. Using modals and other phrases, such as *Would you mind passing the salt?*, is another. These forms are ones that learners, both L1 and L2, need to learn if they are going to communicate appropriately in different social contexts.

In addition to knowing the linguistic forms, it's important to know what social contexts require which forms. That's sociopragmatics. For languages with honorific forms of address, it's important for learners to know which social contexts or social interactions are considered more formal in order to know which forms to use. They also need to know their social position in relation to the listener (higher or lower status). It could be even more complex depending on the language. In Japanese, for example, individuals need to correctly identify their social relationship with the listener. Then, they need to decide whether they want to make themselves lower or make the listener higher; only then can they choose the right pragmalinguistic expressions. In English, sociopragmatic knowledge about making requests involves knowing which situation calls for which level of politeness. For example, sociopragmatic knowledge entails knowing that it's good to use *please* with your teachers and parents if you want to improve the chances of a successful request, but knowing that you don't necessarily need to use *please* with close friends. We'll talk more about other aspects of pragmatics and pragmatics learning in Chapter 8.

1.3.1.5 Discourse

One final component of language to consider is discourse, which refers to language at the level beyond the sentence: in other words, how written texts and spoken language are organized. When telling a story, how is the information organized? When writing an academic paragraph, what structure is used? For example, some English classes in US high schools teach students to write essays using a five-component structure, sometimes called the hamburger structure. The introduction and conclusion of the essay are the buns on the top and bottom of the sandwich, respectively. The contents of the sandwich are three paragraphs on distinct but related topics.

Different types of writing have distinct structures, sometimes referred to as **genres**. For example, a narrative or story does not have the same structure as an argumentative essay. In addition, various cultures have different types of discourse structures. For example, in English expository writing, the most important idea typically comes at the beginning of a paragraph, and the rest of the paragraph supports that main idea. However, in Japanese or Chinese writing, the main idea often comes at the end of the paragraph. These differences in the discourse structure of languages are one reason L2 students sometimes struggle with academic writing even when their general L2 proficiency (i.e., knowing grammar and vocabulary) is high. In fact, L1 writers also need to learn written discourse features if they want to communicate well with the reader.

Although we probably think about discourse mostly when it comes to writing, oral language also has discourse structure. This is especially true of languages and cultures that do not have a long tradition of literacy. Rather, people learn to be good orators by following the discourse expectations when giving a speech or telling a story. However, even in print-focused cultures, oral language has structure. For example, telling a joke requires a specific type of discourse structure. We'll talk more about other aspects of discourse and discourse learning in Chapter 9.

1.3.2 Languages around the World

In addition to considering the specific components of language, it's important to examine the social construct of language. In other words, what does it mean when someone says that they speak English, Japanese, or any other language? There are over 7,000 languages in the world. Sometimes languages are associated with specific nation-states, such as Korean/Korea and German/Germany. Others, such as French, Spanish, or English, have been spread beyond their initial regions through colonialism, and still other languages are dying because the number of speakers is diminishing. For many Native American languages, there are only a handful of speakers left because the language has not been passed down to subsequent generations (the reasons for which are beyond the scope of this book).

While it seems like these languages are neat and tidy things, if we start to unpack them a bit, things start to get messy. When we refer to English, what do we mean? Do we mean the

English that is spoken in England? The UK? The USA? What about New Zealand, Australia, and Canada? Or India, Nigeria, and Jamaica? Braj Kachru (1985) proposed the idea of different circles of English, depending on where it is spoken and the context in which it is learned. The inner circle includes countries in which English is learned as an L1 and is the predominant language of society. The outer circle includes countries in which English was introduced through colonization and has become a language for communication among people who speak a variety of different national languages. Finally, the expanding circle includes countries where English is taught as a foreign language and is not used in wider society.

In addition to the different circles of English, there is local variation within the inner circle countries. For example, there is considerable regional and social variation in English in the UK and to a lesser extent in the USA. Often, when people refer to a language such as English, they consciously or unconsciously have an idealized form of it in mind, which can be referred to as the **standard variety**. A standard variety is the way of speaking the language that has social prestige, but there are also **nonstandard varieties**, which typically have lower social prestige. For example, standard American English is based on a fairly neutral Midwestern variety (the one typically heard on US news channels). Nonstandard varieties, such as African American Vernacular English or Southern English, differ from the standard variety in terms of grammar, lexis, or pronunciation.

Society tends to judge standard and nonstandard varieties as good language versus bad, broken, or uneducated language. However, from a linguistic point of view, there is no such thing as bad language. Every language has its own logical, consistent system, even if it differs from other varieties of the language. Instead, the judgement against so-called bad language is made from a social point of view (called socially constructed bias), in which speakers of the so-called bad language are viewed in some lesser way or discriminated against. In this way, language serves as a proxy for other, less socially acceptable types of discrimination based on race, economic status, or other characteristics. Researchers have investigated the social judgements that speakers of standard and nonstandard varieties receive. For instance, some people might rate the same person differently in terms of status (e.g., wealth, intelligence, success, and importance) or solidarity (e.g., friendliness, honesty, reliability, and likability) depending on whether they are speaking a standard or nonstandard variety. We will talk about social issues more in Chapter 12.

Another term related to nonstandard language is **dialect**, which has sometimes been described as a language without an army. In other words, a dialect doesn't have the political and social status that a so-called language does, even though from a linguistic perspective there's no difference in the legitimacy of the linguistic systems. Again, society often uses the term "dialect" to reduce the social status of a language and its speakers. For example, in 1984, the small European country of Luxembourg declared that Luxembourgish would be an official language of the country, along with French and German. Thus, a political event elevated the status of what had previously been considered a dialect of German.

Empirical Evidence 1.1

McCullough et al. (2019) investigated attitudes toward different dialects. Participants (N = 240) were L1-English speakers in the USA ranging from 4 to 75 years old. They listened to speech samples of four American dialects: Midland, North, South, and New England. They were asked to rate the speakers' geographic locality (where the speaker was from), status (e.g., smart, rich), and solidarity (e.g., honest, friendly). The results showed that South and New England accents were downgraded compared to Midland and North. By the age of 8, children could classify different dialects as well as adults could. However, age didn't show any consistent patterns when rating solidarity. The researchers argued that schooling, travel, and cultural knowledge about stereotypes and language prestige play a role in mitigating negative attitudes toward specific dialects.

RECAP

- Language is a systematic means of communication.
- Morphosyntax, also called grammar, refers to how words and sentences are formed.
- Vocabulary focuses on words, word formation, and form–meaning mappings.
- Pronunciation consists of individual segmental sounds and suprasegmental elements, such as tone and stress.
- Pragmatics refers to the use of language in social contexts, and is divided into pragmalinguistics (knowing which linguistic structures convey which social meanings) and sociopragmatics (knowing which social context calls for which type of language use).
- Discourse is the structure of extended segments of language, such as a written paragraph or an oral story.
- Languages have standard and nonstandard varieties, which have different social prestige but are all valid linguistically.

1.4 What Is First Language Acquisition?

Now that we have a better understanding of what language is, we can consider how infants go about learning their L1. An L1 is learned from birth, and learning that language is one of the primary jobs that children have in their first years of life. During their early years of development, children are generally exposed to large amounts of input from people around them, especially from their caregivers. For that reason, an L1 is sometimes called a mother tongue because mothers have traditionally been the most prolific source of language input for young children, starting from breastfeeding. In addition to receiving input, young children start producing output as well. At first, their output consists only of random sounds and gurgling, but within the first year, children are generally able to produce a few recognizable words. In the next few years, their linguistic abilities continue to grow, so that by the time they are about age 5 and start primary school, they have basic knowledge of their L1. At this point, L1-English children know around 10,000 words and the basic grammatical rules of the language.