INTRODUCTION TO LANGUAGE DEVELOPMENT

Third Edition

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PREFACE

This text is inspired by teaching students in language acquisition courses. The goal is to ensure that complex concepts are presented at an appropriate level for students' understanding and learning. An additional goal is to prepare students for future practice. To address these goals, these are features of the third edition:

- Updated information to reflect current research
- Expanded focus on evidence-based practice
- Improved readability through the use of boxes, explanations, and definitions that clarify concepts
- A greater number of figures and tables for deeper comprehension

To help students better understand the process of language acquisition, this text presents an integrated view of the various factors that play an important role in children's acquisition of language: articulation, syntax, semantics, phonology, morphology, pragmatics, hearing, cognition, and literacy. To prepare students for what follows, an introductory chapter presents terminology and concepts that students will encounter in the following chapters. To support students' learning, each chapter begins with a case study and learning objectives. Case studies allow instructors to involve students in classroom discussions while developing critical thinking and problem-solving skills. Learning objectives are provided to guide students' learning. Within each chapter, boxes, tables, figures, and examples elaborate and clarify the information presented. Study questions appear at the end of each chapter to ensure students understand and retain the information presented in the text and classroom lectures. A comprehensive glossary of the key words in each chapter is included to help students locate and grasp the definitions of key terms. On the PluralPlus companion website, multiple-choice questions that address the material in each chapter are available, along with PowerPoint lecture slides for all chapters.

Highlights of the third edition include:

A chapter that introduces theories of language development. Understanding the theoretical foundations of language development is an essential prerequisite for future evidence-based practice. This chapter concludes with practical strategies drawn from these theories.

Several chapters include information on the language, speech, and cultural differences that can appear when

children are learning a new language. The goal is for students to be able to distinguish differences from disorders. This information is essential, given that 5 million or more school-aged children in the United States alone are English-language learners.

A chapter on the brain in relation to speech, language, and cognitive development is an important contribution to students' knowledge, given the frequent interaction between speech-language pathologists and other practitioners (e.g., neurologists, psychologists, doctors, occupational therapists, physical therapists). This chapter also allows students to understand the processes involved in learning.

A chapter on literacy development offers strategies to support children's literacy skills. The importance of literacy goes beyond reading and writing. Literacy skills are intertwined with oral language and are used to support success in mathematics skills and other academic subjects in later grades.

A chapter on bilingualism introduces students to an important area of knowledge, given the growing number of children in schools who are learning a new language. This chapter describes sociocultural factors related to bilingual language acquisition, summarizes bilingual language development, applies best-practice principles for assessment, and describes cross-linguistic and bilingual approaches to intervention.

A chapter on hearing loss introduces students to the impact of hearing loss on language development. While students do enroll in an audiology course within their study program, this chapter focuses on the consequences of hearing loss for speech and language.

1

An Introduction to Language Acquisition

Sandra Levey

Case Study

Casey is a kindergartner who has communication difficulties. She does not initiate conversations with other children in the class and friends sometimes do not understand her because of her difficulty in producing some sounds and her habit of leaving some sounds out of words (e.g., "top" instead of *stop*, "tay" instead of *stay*, and "pay" instead of *play*). She also has difficulty understanding directions when the teacher is asking the children to complete a task. Identify the areas of difficulty by whether they involve communication, speech, or language.

CHAPTER OBJECTIVES

This chapter presents an overview of children's language development, with a focus on the terminology and concepts that you will encounter in the chapters that follow. This chapter includes a discussion of *differences*. This term refers to language factors associated with children who are learning a second language. There are a growing number of new language learners in classrooms across the world. For example, in one classroom of 30 students in the United States, 14 different languages were spoken. The ability to distinguish between a true communication disorder and a language difference (due to learning a new language) is essential to

providing evidence-based assessment and intervention. After reading this chapter, you should understand:

- The distinction between communication (the process of information exchange), speech (the production of sounds), and language (conveyed by the meaning of words, sentences, and longer utterances)
- The five components of language (syntax, semantics, morphology, phonology, and pragmatics)
- The role of cognition in language
- Some of the terminology found in later chapters in this text
- The differences that may appear when children are learning a new language

DEVELOPMENTAL STAGES OF TYPICAL LANGUAGE DEVELOPMENT

We begin this chapter with an overview of children's speech and language development. Typical development begins from birth to 3 months of age when infants produce cooing sounds (American Speech-Language-Hearing Association, 2020). At 4 to 6 months of age, speechlike sounds are produced that typically consist of syllables (e.g., *pa, ma, mi*). At 7 months to 1 year of age, children begin to imitate and produce single words (e.g., *hi, dog, dada, mama*). At 1 to 2 years of age, two-word utterances are produced (e.g., *more juice*). At 3 to 4 years of age, children produce *wh-* questions, pronouns, plurals, and rhymes. At 4 to 5 years of age, children produce stories and adapt to different listeners in communicative interaction.

When children enter kindergarten, they are able to follow simple directions, retell a story, describe an event, and initiate conversation (American Speech-Language-Hearing Association, 2020). In first grade, children produce and answer questions, share ideas, and maintain the topic of conversation. In second grade, greater complexity appears in children's sentence production and ability to explain ideas. By third grade, children engage in conversation and discussion and follow pragmatic rules in interaction (e.g., topic maintenance, eye contact, and turn taking). In fourth grade, children begin to understand figurative language. Figurative language consists of a word or phrase that differs from its literal meaning (e.g., "Busy as a bee"). Examples of figurative language consists of simile (e.g., "Brave as a lion"), metaphor (e.g., "He is a shining star"), and hyperbole (e.g., "These books weigh a ton"). These examples show the use of words and phrases that do not correspond to ordinary use. The understanding of figurative language indicates more complex language abilities, as described in Chapter 6. When children enter fifth grade, they increase their vocabulary, engage in classroom discussions, and can describe the plot of a story. These stages will be described in the following chapters.

COMMUNICATION, SPEECH, AND LANGUAGE

Communication

Communication is the process of exchanging information about a speaker's ideas, thoughts, feelings, needs, or desires. We possess the ability to communicate using various modalities: verbal, written, gesture, pantomime, drawing, or sign language. The ability to communicate a message successfully and to understand the

concepts being communicated is termed *communicative competence*. Communicative competence consists of the ability to communicate through verbal, written, or nonverbal means (Ahmed & Pawar, 2018). Communicative competence involves the appropriate use of language in interaction, while linguistic competence refers to the acquisition and use of morphology, phonology, syntax, and semantics (Gleason & Ratner, 2017).

Morphology: How words and smaller units can be combined to form other words (*go* + *ing* = *going*)

Phonology: How sounds are combined to form words (*c* + *a* + *t* = *cat*)

Syntax: How words are combined to express meaning in sentence structures (*I* + *see* + *a* + *bird*)

Semantics: How words correspond to things and events in the world ("It is raining") and how language reflects a speaker's intent ("I want to tell you a story") or feelings ("I am happy")

Communicative competence involves the ability to successfully communicate with others. Practitioners and educators should be aware that new language learners also need the ability to successfully communicate in a new language to possess communicative competence. To achieve this goal, educators should encourage students to interact and to work in groups or pairs to facilitate learning the new language within classrooms (Ahmed & Pawar, 2018). These experiences also allow students to build confidence in their communicative competence to interact in the new language.

Communicative interaction involves the exchange of information between a sender (speaker) and a receiver (listener). In the exchange of information, the sender transmits information (encodes) that the receiver comprehends or understands (decodes).

Encoder/speaker: I have a new toy!

Decoder/listener: Can I play with it?

Receptive language is the ability to understand others and expressive language is the ability to express and share thoughts, ideas, and feelings. Receptive language is the understanding of spoken language, sometimes referred to as auditory comprehension. It is the ability to understand language (i.e., the meanings of words, sentences, stories, and conversation); concepts (e.g., size, color, emotions, and time); and directions (e.g., Put your books away and open your crayon box). Expressive language is the ability to convey meaning and thoughts through the production of words and sentences, retelling of events and stories, and engaging in conversation.

In addition to the verbal or spoken features of communication, a listener must learn to interpret the paralinguistic cues that accompany spoken language (Table 1–1). Paralinguistic cues accompany spoken language and often help the listener better understand a speaker's meaning. For example, a speaker can use facial expressions to convey feelings. A speaker can also use intonation to express a question (rising intonation across a spoken utterance) or a statement (falling intonation across an utterance to

Table 1–1. *Paralinguistic Cues*

Affect	Facial expressions
Gestures	Head nods that indicate agreement or disagreement
Posture	Body position
Physical	Distance or proximity between a speaker and a listener
Intonation	Voice or vocal pitch that marks the difference between a statement (falling intonation) and a question (rising intonation)
Word stress	Emphasis on a single syllable word or on syllables in a multisyllabic word (e.g., *baNAna*)
Speech rate and rhythm	Fast, moderate, or slow, and pause or hesitation
Volume or intensity	Louder speech indicates anger or assertiveness
Pitch	High or low pitch used by different speakers
Inflection	Differences related to the context (exaggerated inflection when reading to a child versus natural inflection in conversation with an adult)

confirm a fact). Produce each of the sentences that follow to demonstrate the differences in intonation in the productions of a question, a statement, or a confirmation that it is Jason who is coming.

Asking if he is coming: Jason is COMING?

Confirming that he is coming: Jason IS coming.

Asking if it is really Jason who is coming: JASON is coming?

Prosody is a communicative tool that involves duration (length), intensity (loudness), and frequency (pitch) when producing words or longer utterances. Prosody allows us to communicate different attitudes, such as sarcasm or sympathy, by changing the duration, intensity, and frequency of our spoken language. For example, notice that you can express sarcasm by producing the first syllable in the word with greater duration or length than the second syllable (e.g., REAlly?). In other words, we can change the meaning of an utterance using paralinguistic cues. Another factor in communication is the rhythm of speech. This involves the rising and falling patterns across the production of an utterance. For example, a sentence may consist of the following rhythm patterns shown below (with rising patterns shown in capitalized syllables or words).

I know you prefer the BIGGER cookie.

I KNOW you prefer the bigger cookie.

I know YOU prefer the bigger cookie.

At times, the rhythm of speech is broken by hesitation or fillers as a speaker tries to think of a word. Common fillers

include the use of *uh*, *like*, and *you know*. It is important to understand that hesitation should not be considered a sign of a disorder, as children learning a new language often hesitate while searching for a word in the language being learned. In fact, both first and second language speakers show pauses, fillers, hesitations, repetitions, and errors (Williams & Korko, 2019).

Speech and Articulation

Speech is defined as verbal communication through articulation. Articulation involves the production of speech sounds by movement of the lips, tongue, and soft palate or velum (Figure 1–1).

The velum plays a role in the production of certain sounds. The larynx is a muscular organ that contains the vocal cords or folds (Figure 1–2). The vocal cords are stimulated by respiration (i.e., air from the lungs). The vocal folds vibrate to produce phonation or voice (i.e., sound produced by the vibration of the vocal folds). The respiratory system provides the support for phonation (Figure 1–3).

Phonemes

Notice that you bring your lips together to produce the sounds *p* and *b* when producing the initial sounds in the words *pat* and *bat*. The sounds *p* and *b*, along with many other sounds in English, are termed phonemes. Phonemes are the smallest units of sound that create a difference in meaning (e.g., /p/ versus /b/ to distinguish *pea* versus *bee*). Note that the change

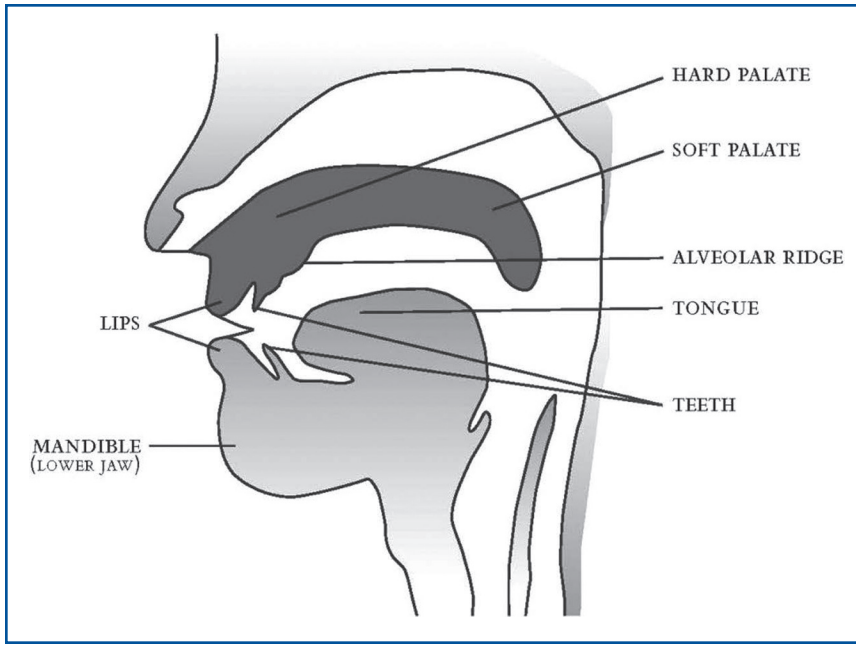

Figure 1–1. *The movable articulators consist of the lips, tongue, and velum (soft palate). Reproduced with permission from Levey, S., and Polirstok, S. (Eds.). (2011).* Language development: Understanding language diversity in the classroom. *SAGE Publications.*

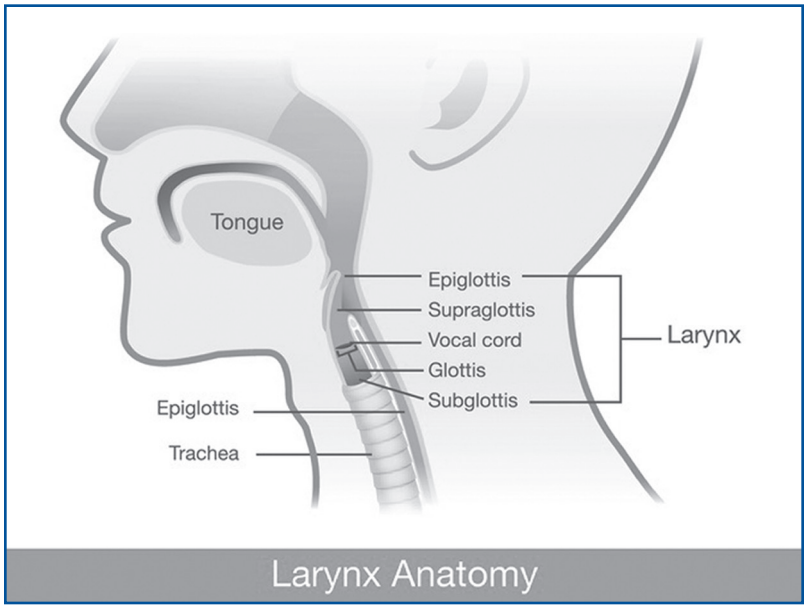

Figure 1–2. *The larynx. The vocal cords, also called the vocal folds, are shown. The glottis is the space between the vocal folds. The epiglottis is attached to the entrance of the larynx and is open for breathing and closed during swallowing. The supraglottis is the area above the glottis and the subglottis is the area below. The trachea is a tube that extends from the larynx to the bronchial tubes in the lungs, allowing air to flow to and from the lungs. Reproduced with permission from Getty Images.*

of the initial phoneme in a word results in a change in word meaning, shown in the following examples.

/pi/ versus /bi/	*pea/bee*
/su/ versus /tu/	*sue/two*
/bæt/ versus /kæt/	*bat/cat*

Phonemes are the abstract representation of speech sounds (phones), with phonemes indicated by slashes (e.g., /p/ and /b/), as found in the words *pat* /pæt/ and *bat* /bæt/. Consonant phonemes (Table 1–2) and vowel phonemes (Table 1–3) are types of English phonemes that compose words.

There are also vowels that are classified as rhotic diphthongs. These are phonemes that occur in words such as *ear* (/iɚ/), *air* (/eɚ/), *door* (/oɚ/), and *car* (/aɚ/). These phonemes are a combination of a vowel and the vowel /ɚ/. Although these sounds are combined, a rhotic diphthong is considered a single sound. Examples of these words and their phonetic forms appear below.

/iɚ/	*ear, deer, hear, near*
/eɚ/	*air, hair, care, pair, stair*
/oɚ/	*door, floor, more, wore*
/aɚ/	*car, cart, jar, far*

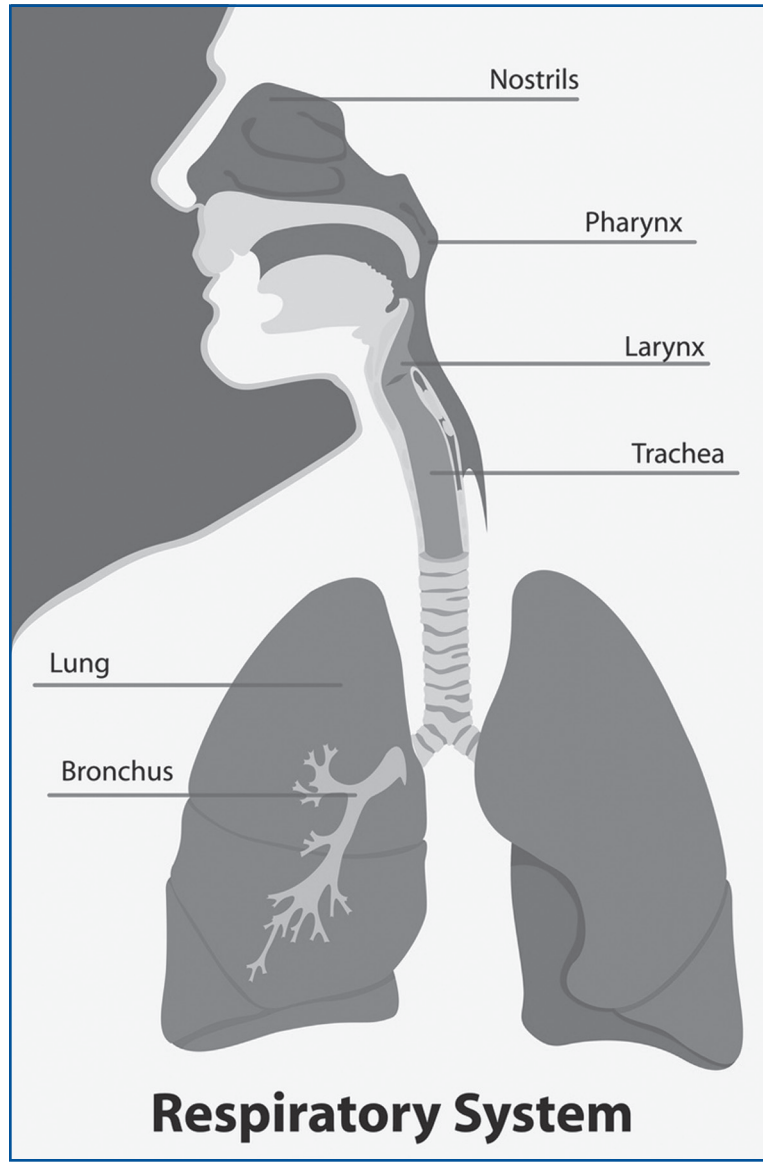

Figure 1–3. *The respiratory system consists of the lungs and bronchus, which is one of the two tubes (bronchi) that carry air from throat to lungs and air into the lungs. The pharynx is the place in the mouth where the nasal passages connect to the mouth and throat. Reproduced with permission from Getty Images.*