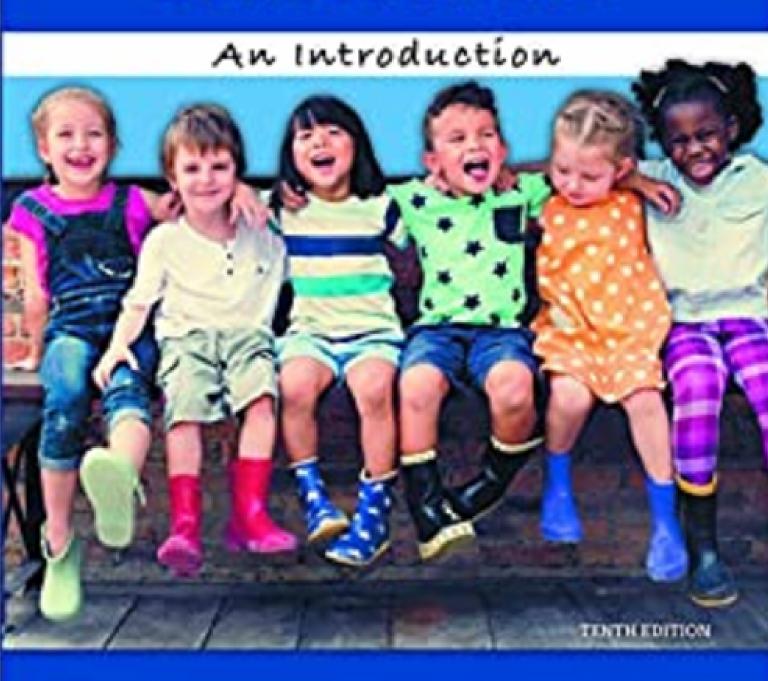
LANGUAGE DEVELOPMENT





Language Development

An Introduction

Robert E. Owens, Jr. College of Saint Rose



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1 19

"Say that again. I didn't hear you. I was listening to my toast." Jessica Owens, age 4

> To my gran'kids, Cassidy, Dakota, and Zavier.

Preface

There is no single way in which children learn to communicate. Each child follows an individual developmental pattern just as you did. Still, it is possible to describe a pattern of general communication development and of English specifically. This text attempts such descriptions and generalizations but emphasizes individual patterns, too.

New to This Edition

For those readers familiar with older editions, you'll find much has changed and, hopefully, much that you'll like. The changes in the 10th edition of *Language Development: An Introduction* are as follows:

- I rewrote the entire section on working memory in light of the plethora of new research on this topic and its importance for language use.
- I provided new video links. Although YouTube provides a wealth of videos and I
 have used them in the past, several professors had written to me to tell me that the
 links no longer worked. Still, I encourage you to look to YouTube for examples of
 children using language.
- Although I've resisted an entire chapter on bilingualism and dialectal differences because it highlights difference rather than stressing similarity, I have consolidated the bilingual research into Chapter 8 in an effort to make it seem less disjointed.
- Several students have told me they enjoy that unlike other texts this one seems to talk to them. Encouraged by this feedback, I have continued to improved readability throughout with more thorough explanations and clarification/simplification of terms.
- Chapter 2 is shorter and reconceptualized to include learning theories. There is always the pull between more professors who have a linguistic background and those with less theoretical training. As in the past I've tried to keep the text practical and employ theories where they enlighten and not make the text into a doctrinaire thesis.
- As in the past, I've provided more child language examples throughout to better illustrate language structures.
- At the suggestion of several respected colleagues, I have increased the discussion of the importance of play for development of language.
- In addition, I broke up and simplified the discussion of reading comprehension, which was needlessly difficult and entangled.
- And, of course, I updated the research. I spent more than 8 months just reading before I even began to edit. For those compulsive types who count number of bibliographic entries, you'll find approximately 250 new references along with several retirements of older material. This is the result of reading several hundred new research articles.

That's enough to exhaust me just talking about it. My hope is that you'll also find the new edition very useful.

Hopefully, those of you who will one day become parents should appreciate the value of this text as a guideline to development. If you plan to work with children with disabilities and without, you'll find that typical development can provide a model for evaluation and intervention. The developmental rationale can be used to decide on targets for training and to determine the overall remediation approach.

In recognition of the importance of the developmental rationale as a tool and of the changing perspectives in child language development, the 10th edition offers expanded coverage of preschool- and school-age language development. Pragmatics receives increased attention, as does the conversational context within which most language development occurs. If you're a prospective speech-language pathologist, you will find these developmental progressions valuable when making decisions concerning materials to use with children who have speech and language impairments. As consumers of educational and therapeutic products, you must be especially sensitive to the philosophy that governs the organization of such materials. Many materials claim to be developmental in design but are not. I recall opening one such book to find *please* and *thank you* as the first two utterances to be taught to a child with deafness. These words violate many of the characteristics of first words.

Experienced teachers, psychologists, or speech-language pathologists need not rely on such prepackaged materials if they have a good base in communication development. An understanding of the developmental process and the use of a problem-solving approach can be a powerful combination in the hands of creative clinicians.

Acknowledgments

A volume of this scope must be the combined effort of many people fulfilling many roles, and this one is no exception.

My first thanks go to all those professionals and students, too numerous to mention, who have corresponded or conversed with me and offered criticism or suggestions for this edition. The overall organization of this text reflects the general organization of my own communication development course and that of professionals with whom I have been in contact.

The professional assistance of several people has been a godsend. The College of Saint Rose is an environment that encourages collaboration and individual professional growth, and it's a great place to work. I would like to thank the faculty of the Department of Communication Sciences and Disorders and the entire faculty and administration at the College of St. Rose in Albany, New York. What a wonderful place to call home. The college places a premium on scholarship, student education, professionalism, and a friendly and supportive workplace environment and recognizes the importance of our field. I am indebted to all for making my new academic home welcoming and comfortable. I am especially thankful to President Carolyn Stefanco, School of Education Interim Dean Terry Ward, my chair Jim Feeney, and my colleagues in my department, fellow department members Robin Anderson, Elizabeth Baird, Marisa Bryant, Sarah Coons, Dave DeBonis, Jessica Evans, Colleen Fluman, Elaine Galbraith, Julie Hart, Director of Clinical Services Jackie Klein, Zhaleh Lavasani, Deirdre Muldoon, Jack Pickering, Melissa Spring, Lynn Stephens, and Julia Unger and recently retired colleagues Anne Rowley and Barbara Hoffman. You have all made me feel welcomed and valued.

Others included in my list are:

- Dr. Addie Haas, retired professor in the Communication Disorders Department at State University of New York at New Paltz, is a dear friend; a trusted confident; a good buddy; a fellow hiker; a skilled clinician; a source of information, ideas, and inspiration; my go-to person to bounce ideas around; and a helluva lot of fun. I will never forget our adventures together.
- My brilliant professional colleague and friend Stacey L. Pavelko, Ph.D., at James Madison University with whom I am currently authoring Sampling Utterances and Grammatical Analysis Revised (SUGAR). SUGAR is a language sample analysis (LSA) tool, and you can visit us at www.sugarlanguage.org to learn more. I've alluded to SUGAR in Appendix D.
- My dear friend Professor Omid Mohamadi has kept me alert to new possibilities and given me a fresh perspective on the field of speech-language pathology. I look forward to more collaborations.

Additionally, I would like to thank the reviewers of this 10th edition: Karen Copple - Eastern New Mexico University, Pamela De Jarnette - Southern Connecticut State University, and Cecilia H. Jeffries - South Carolina State University.

I would also like to express my love and appreciation to my children, Jason, Todd, and Jessica, who are as beautiful as adults as they were as youngsters; to my gran'kids, Cassidy, Dakota, and Zavier, whose language is sprinkled throughout this book; and to my colleague, Moon Byungchoon.

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> Thanks all, **Bob Owens**

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Chapter 1 The Territory



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Objectives

Before we can discuss language development, we need to agree on what language is and what it is not. Don't worry; as a user of language, you already know a great deal about it. This chapter will organize your knowledge and provide some labels for the many aspects of language you know. Don't panic—introductory chapters usually contain a lot of terminology so that we can all "speak the same language" throughout the text. When you have completed this chapter, you should be able to:

- **1.1** Explain the differences among speech, language, and communication
- **1.2** List the main properties of language
- **1.3** Differentiate the five components of language and their descriptions
- **1.4** Describe what a dialect is, its relation to its parent language, and the factors that determine dialects

Key Terms

After reading this chapter you should know the following important terms:

antonym phoneme bilingual phonology bound morpheme pragmatics code switch register

communicative competence selection restrictions semantic features deficit approach

dialects semantics

discourse sociolinguistic approach

free morpheme speech

language style shifting

linguistic competence suprasegmental devices

linguistic performance synonym metalinguistics syntax morpheme vernacular

word knowledge morphology nonlinguistic cues world knowledge

paralinguistic codes

Language and how you learn and process it are incredibly complex. In fact, despite the struggles you may have had with some academic courses, they were nothing compared to the task of learning language. Trying to explain language learning and use is the job of professionals called linguists, or language scientists. These specialists try to deduce rules and patterns demonstrated when we, as users of a language, communicate with one another. For example, a linguist may try to explain why some children say, "I eated a ice cream" or why you occasionally use the wrong word even when you know the correct one. Some of this is what will explore throughout this text.

You're already a mature language user, but let's imagine that you encounter human language for the first time. Even if you had the most sophisticated computer-based code-breaking software, it would be nearly impossible to figure out the many ways in which humans use language. For that task, you would need to decipher each of the 6,000 human languages and gain extensive knowledge of human interactions, emotions, and cultures. Even our best computers when programmed for language sound wooden or rigid. The nuances and naturalness of language are missing. In other words, language is more than just the sum of all the parts. There's a human element. To understand language, we need to consider it in the natural contexts in which it occurs. The meaning of a simple "Sure, why not" can vary greatly depending on what's happening when it's said.

Language is the premier achievement of humans, and using it is something that nearly all of us can do. For example, the average adult English speaker produces about 150 words a minute, selecting each from between 30,000 and 60,000 alternatives stored in the speaker's brain, choosing from a myriad of English language grammatical structures, and making less than 0.1% errors! That's impressive! As a college student, you most likely exceed even this impressive standard.

These feats become all the more amazing when you realize that with very little instruction, the typical 4-year-old child has already deciphered much of American English and has well-developed speech, language, and communication skills. This is truly remarkable given the complexity of the task!

You probably don't recall much about your own language acquisition. One statement is probably true: Unless you experienced difficulty, there was no formal instruction. Congratulations, you did most of it on your own. Now, we're going to attempt something almost as momentous . . . trying to explain it all!

To appreciate the task involved in language learning, you need to be familiar with some of the terminology that is commonly used in the field. All the terms introduced in this chapter and throughout the text are summarized for you in the Glossary. The remainder of this chapter is devoted to an explanation of these terms. First, we discuss this text in general. Then we distinguish three often-confused terms—speech, language, and communication—and look at some special qualities of language itself. Finally, we'll examine dialects.



Video Example 1.1: The Most Important Language You Will EVER **Learn** contains a great TED Talk by Poet Ali on language, languages and communication, especially the universality of some forms of communication. In addition, it's

Source: https://youtu .be/488ZBeaGo6s

amusing.

This Text and You

Although the full title of this text is Language Development: An Introduction, it is not a watered-down or cursory treatment of the topic. For many of you this will be your only language development course. For this reason, I've attempted to cover every timely, relevant, and important aspect of language development that might be of interest to the future speech-language pathologist, educator, psychologist, child development specialist, or parent. People will look to you for answers and explanations. The information you'll need to know is complex and specific.

No doubt you've at least thumbed through this book. It may look overwhelming. It's not. I tell my own students that things are never as bleak as they seem at the beginning of the semester. In the past 40 years, I have taken more than 5,000 of my own students through this same material with a nearly 100% success rate. Let me try to help you find this material as rewarding to learn as it is to teach.

The text is organized into two sections. The few chapters provide a background that includes terms, theories, and information on the brain and language. I know it's difficult to have to read this material when you really want to get to the development part, but believe me, all this background is necessary. The main topics of development are contained in the remaining chapters, which are organized sequentially from newborns through adults. Yes, adults, even you are still learning language and adapting to changes.

As with any text, there are a few simple rules that can make the learning experience more fruitful.

- Note the chapter objectives prior to reading the chapter and be alert for this information as you read. That's the key information to remember.
- Read each chapter in small doses, and then let it sink in for a while. The worst thing to do is put it off until the night before the test.
- Find the chapter organization described at the end of each chapter's introduction. This will help you know where we're going and follow me through the material.

- Take brief notes as you read. Don't try to write everything down. Stop at natural divisions in the content, and ask yourself what was most important. Periodic summarizing is a great learning strategy.
- Review your notes when you stop reading and before you begin again the next time. This process will provide a review and some continuity.
- Try to read a little every day or every other day. That's a good long-term learning strategy. I say long-term because if you are a speech-language pathology student, you'll be seeing a lot more about language in your studies.
- Note the key terms in the chapter objectives, and try to define them as you read.
 Each one is printed in blue in the body of the chapter. Please don't just thumb through or turn to the Glossary for a dictionary definition. The terms are relatively meaningless out of context. They need the structure of the other information. Context is very important.
- Try to answer the questions throughout each chapter. They'll help you think more deeply about the material.
- I have tried to de-emphasize linguists, authors, and researchers by placing all citations in parentheses. Unless your professor calls your attention to a specific person, she or he may not wish to emphasize these individuals either. It may be a waste of time to try to remember who said what about language development. "He said—she said" memorization can be very tedious. The exceptions, of course, are individuals mentioned specifically by name in lecture and in the text.
- Make ample use of the weblinks and videos to enhance your understanding. Additional information is always good.

I hope that these suggestions will help, although none is a guarantee.

Roll up your sleeves, set aside adequate time, and be prepared to be challenged. Actually, your task is relatively simple when compared to the toddler faced with deciphering the language she or he hears, but that will have to wait for a few chapters. Let's get started.

Speech, Language, and Communication

We'll be studying the changes that occur in *speech*, *language*, and *communication* as children grow and develop. You might think of these terms as having similar meanings or as being identical. Actually, they're very different and denote different aspects of development and use.

Speech

Speech is a verbal or spoken means of communicating. Other ways of communicating include but are not limited to writing, drawing, and manual signing. Speech is a process that requires very precise neuromuscular coordination and results from planning and executing specific motor sequences. Each spoken language has specific sounds or phonemes, such as "s" or /s/, plus sound combinations, such as "sl" of /sl/, that are characteristic of that language. In addition, speech involves other components, such as voice quality, intonation, and rate. These components enhance the meaning of the message. For example, you probably talk faster when you're excited.

A highly complicated acoustic or sound event, speech is unlike any other environmental noise. Not even music achieves the level of complexity found in speech. Take a simple word such as toe and say it very, very slowly. The initial sound is an almost inhuman "tsch." This is followed by "o . . . w" in which your rounded mouth gradually tightens. Now say toe at normal speed and note how effortlessly this is done. Say it again and note how your brain integrates the signal as it comes in, creating the unified *toe*. You are a truly amazing being!

Speech is not the only means of face-to-face human communication. We also use gestures, facial expressions, and body posture to send messages. In face-to-face conversation, these nonspeech means may carry up to 60% of the information exchanged.

Although humans are not the only animals that make sounds, to my knowledge, no other species can match the variety and complexity of human speech sounds. These qualities are the result of the unique structures of the human vocal or voice tract, a mechanism that is functional months before the first words are spoken. As an infant, you spent much of the first year experimenting with your vocal mechanisms and producing a variety of sounds. Gradually, these sounds come to reflect the language of your environment.

Language

Individual speech sounds are meaningless noises until some regularity is added. The relationship between individual sounds, meaningful sound units, and the combination of these units is specified by the rules of a language. Language can be defined as a socially shared code or system for representing concepts through the use of symbols and rules that govern how they're combined. The symbols or words are actually arbitrary. If you just heard the word *shoe* out of context, you'd have no idea of its meaning. Nothing about the word suggests something to wear on your foot. Fortunately, speakers



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Humans use language to communicate through a number of means, such as reading, writing, speaking, and listening.

of a language know the meanings of these symbols, which they organized in certain predictable ways to convey ideas.

English is a language, as is Spanish or Navajo. Each has its own unique symbols and rules for symbol combinations. Languages are not monolithic. They contain dialects, subcategories of the parent language that use similar but not identical rules. All users of a language follow certain dialectal rules. For example, I sometimes find myself reverting to my childhood dialectal usage in saying "acrost the street" and "open your *um*brella."

Languages change and evolve. Interactions between languages naturally occur in bilingual communities. Under certain circumstances, language mixing may result in a new form of both languages being used in that community (Backus, 1999). When I was a child, we said "tidal wave"; now because of the influence of Japanese, we say "tsunami."

Some languages flourish while others wither. In 2012, for example, there were fewer than 50 individuals who fluently spoke Seneca, a western New York Native American language. It is hoped by the Seneca Nation that this will change with an education and revitalization program.

The death of languages is not a rare event in the modern world. Languages face extinction as surely as plants and animals do. When Kuzakura, an aged woman, died in western Brazil in 1988, the Umutina language died with her. It is estimated that as many as half the world's 6,000 languages are no longer learned by children. These languages will die. Many others are endangered. Most of these have less than a few thousand users. Only strong cultural and religious ties keep languages such as Yiddish and Pennsylvania Dutch viable. How long they will continue to be secure is anyone's guess.

This century may see the eradication of most remaining languages. Sadly, it is doubtful that many of the 270 aboriginal languages of Australia—possibly some of the Earth's oldest languages—will survive. The one that gave us *koala* is already gone. Of the 154 Native American languages now in use, nearly 120 are each spoken by less than a thousand individuals. A few years ago, only three people spoke OroWin, an Amazonian language, and they were all in their sixties. Gullah, spoken by the descendents of African slaves on islands off the coast of South Carolina and Florida, may have 10,000 monolingual speakers. Note that some linguists consider Gullah to be a dialectal variant of African American English. More on dialects later.

The worldwide loss of languages is the result of government policy, dwindling indigenous populations, the movements of populations to cities, mass media, and lack of education of the young. The internet is also a culprit in the demise of some languages. The need to converse in one language is fostering increasing use of English.

Each language is a unique vehicle for thought. For example, in many Native American languages, the Great Spirit is not a noun as in European notions of god but a verb. As a speaker of English, can you even imagine *god* as a verb? It changes the whole concept of a supreme being and broadens our thoughts.

In the rain forest of northwestern Brazil, a language called Pirahã is so unique that it almost defies accepted notions of language. Spoken by approximately 350 people and reflecting their culture, Pirahã consists of only eight consonants and three vowels. Yet it has such a complex array of tones, stresses, and syllable lengths that speakers dispense with their sounds altogether and hum, sing, or whistle using relatively simple grammar by linguistic standards. Meaning depends on changes in pitch and tone.

When we lose a language, we lose an essential part of the human fabric with its own unique perspective. A culture and possibly thousands of years of communication

die with that language, the study of which might have unlocked secrets about universal language features, the origins of language, or the nature of thought. Within oral-only languages, the very nature of language itself is different. Words that have been passed on for generations acquire a sacredness, and speech is somehow connected to the Divine as it is in some indigenous languages.

The death of a language is more than an intellectual or academic curiosity. After a week's immersion in Seneca, Mohawk, Onondaga, and other Iroquois languages, one man concluded:

These languages are the music that breathes life into our dances, the overflowing vessels that hold our culture and traditions. And most important, these languages are the conduits that carry our prayers to the Creator. . . . Our languages are central to who we are as a native people. (Coulson, 1999, p. 8A)

English is a Germanic variation of a much larger family of Indo-European languages as varied as Italian, Greek, Russian, Hindi, Urdu, Persian, and ancient Sanskrit. Although the Indo-European family is the largest family, as many as 30 other families may exist, many much smaller.

Languages can grow as their respective cultures change. English has proven particularly adaptive, changing slowly through the addition of new words. According to the Oxford English Dictionary, approximately 8,000 English words predate the 12th century, including laugh and friend. Other languages, such as Icelandic, have changed little in the past thousand years, possibly because of isolation.

Already the language with the largest number of words—approximately 700,000— English adds an estimated half-dozen words per day. While many of these are scientific terms, they also include words popular on college campuses, such as photobomb (someone you don't know mugging in your selfie), binge-watch (made possible by view on demand), and crowdfunding (online small contributions to finance a project). Some words have new meaning. For example, previously only Moses had tablets; now everybody does. These words tell us much about our modern world.

Although most languages can be transmitted by speech, speech is not an essential feature of language. Many languages are spoken and also written. Some older languages, such as Sanskrit, survive only in written form. To some extent, the means of transmission influence processing and learning.

Some people are surprised to learn that American Sign Language (ASL) is not a mirror of American English. Like Swahili ASL is a separate language with its own rules for symbol combinations. As in spoken languages, individually signed units are combined following linguistic rules. Approximately 50 sign languages are used worldwide, including one of the world's newest languages, Nicaraguan Sign Language, invented by children with deafness to fill a void in their education. On the other side of the Earth in Al-sayyid, a Bedouin village in the Negev desert of Israel, another sign language has arisen without the influence of any other spoken or signed languages to serve the needs of approximately 150 individuals with deafness who reside in the community (Boswell, 2006).

Following is the American Speech-Language-Hearing Association definition of language (Committee on Language, 1983. Used with permission.) The result of a committee decision, this definition has a little of everything, but it also is very thorough.

- Language is a complex and dynamic system of conventional symbols that is used in various modes for thought and communication.
- Language evolves within specific historical, social, and cultural contexts.

- Language, as rule-governed behavior, is described by at least five parameters phonologic, morphologic, syntactic, semantic, and pragmatic.
- Language learning and use are determined by the intervention of biological, cognitive, psychosocial, and environmental factors.
- Effective use of language for communication requires a broad understanding of human interaction including such associated factors as nonverbal cues, motivation, and sociocultural roles.

Languages exist because users have agreed on the symbols to be used and the rules to be followed. This agreement is demonstrated through language usage. Thus, languages exist by virtue of social use. Just as users agree to follow the rules of a language system, they can agree to change the rules. For example, the eth found as an ending on English verbs (asketh) in the King James Version of the Bible has disappeared from use. New words can be added to a language; others fall into disuse. Words such as DVD and blog were uncommon just a few years ago. Users of one language can borrow words from another.

English also borrowed heavily from other languages, while they have felt free to borrow in return. Here are a few English words taken from other languages:

- *Raccoon* (Powhatan, a Native American language)
- Jaguar (Tupi-Guarani languages of the Amazon)
- Immediate (French)
- Democracy (Greek)
- Tycoon (Japanese)
- Sofa (Arabic)
- Piano (Italian)
- Husband and window (Old Norse)

In the process of adoption, meanings and words are changed slightly to conform to linguistic and cultural differences. In the 20th century, English incorporated words such as barrio (Spanish), jihad (Arabic), sushi (Japanese), and schlep (Yiddish).

Even strong, vibrant, firmly entrenched languages struggle against the embrace of the internet and its accompanying English. Formal Spanish has given way to Cyber-Spanish with words such as escapar (escape) instead of salir and un emilio or imail (an e-mail) instead of un correo electrónico.

English has become the language of worldwide commerce and the internet. Possibly a billion people speak English as a second language, mostly in Asia. As they learn English, these speakers are making it their own, modifying it slightly with the addition of words from their languages and incorporating their own intonational and structural patterns. In the near future, it may be more appropriate to think of English as a family of similar languages.

Braj Kachru, a professor in India, hypothesizes that English can be as adaptable to local culture as a musical instrument is to music. More succinctly put, English no longer belongs to the English. In fact, the number of speakers in traditionally English-speaking countries is declining. The "Englishes" of the future may be hybrids or even new languages that may not be mutually understood by users speaking different Englishes.

The socially shared code of English or any language theoretically allows the listener and speaker or writer and reader of that language to exchange information. The shared