UC Santa Barbara

UC Santa Barbara Previously Published Works

Title
Second language acquisition

Permalink
https://escholarship.org/uc/item/98g4d1r6

Authors
Chun, DM
Frodesen, J

Publication Date
2014

Peer reviewed

Chapter 15

Second Language Acquisition

Dorothy Chun and Jan Frodesen

Key Terms

- Automaticity
- Communicative competence
- Critical period hypothesis
- Interaction hypothesis
- Interlanguage
- Nativist theories of SLA
- Sociocultural theories of SLA

Chapter Preview

As we have seen in earlier chapters, language is a complex array of many different components, ranging from individual sounds to whether a particular utterance or sentence is appropriate in a given situation or culture. In this chapter we will look at the issues involved in learning or acquiring a second language as an adolescent or adult learner. The main question with regard to **second language acquisition** (**SLA**) is: Why do people acquire a first language with little conscious effort while it is so difficult to master all of the aspects of a second language and speak it like a native speaker?

This chapter will first discuss the main linguistic issues with regard to how second languages are acquired (e.g., phonology, morphology, syntax, lexicon/vocabulary, pragmatics). It will then describe some of the influences from the field of psychology on the study of second language acquisition and will examine the cognitive processes that differ between first-language (L1) and second-language (L2) learning. Thirdly, the chapter will consider how social and affective issues of L2 learning have come to the forefront in the last decade of the 20th century and into the 21st century. Finally, interspersed throughout the chapter are discussions of the

relationship between current knowledge about how second languages are acquired and the practice of language teaching, including some of the current issues in language teaching, especially those arising from increased globalization.

List of Aims

At the end of this chapter, students should be able to:

- Explain the "nature vs. nurture" argument in terms of second language acquisition
- Explain why learning pronunciation of a second language is more difficult than learning that of one's first or native language
- Describe what developing vocabulary knowledge in a second language involves beyond word definitions
- Explain the distinctions between form, meaning and use in acquiring grammatical competence
- Give examples of sociolinguistic/pragmatic/cultural differences in a second language that would make the same utterance that one might use in one's native language inappropriate

Introduction

Many of us grew up hearing and speaking only one language, our "native language," "mother tongue," or **L1**. Others, the lucky ones, heard and spoke more than one language as children. As we progress into the 21st century, children in many parts of the world, including the U.S., grow up speaking more than one language for a variety of reasons (e.g., their community is multilingual, they or their parents are immigrants, they learn foreign languages in school).

SIDEBAR 15.1

If you have learned a language other than your mother tongue, at what age did you start? Were you able to learn this second (or third) language as perfectly and with little conscious effort like the first? Which aspects of learning your second language were easy? What was more difficult? Think about how you learned vocabulary, pronunciation, grammar, and knowing how to talk to your friends vs. knowing how to talk with adult strangers. Can you hypothesize why certain aspects of language were easier to learn than others?

No matter how many languages one grew up with, many adults want to learn other languages for various reasons. As a result, numerous commercial products and websites aim to address this need. Some promise that you can learn a new language effortlessly, without translation, painful memorization, or boring grammar drills. All you have to do is tap your innate language learning ability, and learning a second language will be as natural and painless as learning your first. But as we will see, ***successful second language learning depends on a complex array of linguistic, social, cognitive, and affective variables***.

Students interested in linguistics and language learning often consider a career in teaching language. In English-speaking countries such as the United States, Canada, or Australia, there are many types of English as a Second Language (ESL) programs for learners of all ages. In addition, since English has become a global *lingua franca*, there are numerous opportunities to teach English as a Foreign Language (EFL) in other countries. Native speakers of English or proficient second language speakers of English might well find opportunities to teach English or work in related areas such as language policy or the development of teaching materials at home or abroad. Or perhaps you are fluent in a language other than English and thus considering foreign language teaching possibilities.

Linguistic issues in second language acquisition (SLA)

As adults, most of us do not consciously remember how we learned our first language. It seems that we did not have to memorize vocabulary, learn grammar rules, or think consciously about how to speak politely to our elders. Learning, or acquisition of L1 was effortless. But learning a second language seems very different and much more difficult. Many issues arise for second-language learners. The type of explanation that is appropriate for each issue will depend on the aspect of language it involves.

TEXTBOX 15.1. **Acquisition versus Learning**

Although the words *acquisition* and *learning* are often used interchangeably, there is a tradition within SLA that draws the following distinction between the two: *acquisition* is the process of a child's L1 development in which he or she gradually begins to produce the language without consciously thinking about the rules of grammar, the pronunciation, or the intonation. In contrast, *learning* occurs with second languages, particularly if the primary source of exposure to the language is a classroom—that is, not a "natural" situation—in which learners must consciously memorize words and rules, deduce patterns in the language, and think about producing sounds and rhythms that are "unnatural" in comparison to the L1.

Phonology and Pronunciation

One of the most interesting questions regarding L2 phonology and pronunciation is why attaining native-like pronunciation presents one of the greatest challenges to second language learners. Almost everyone has known immigrants to their home country who have lived there for many years, and although the grammar and vocabulary of the new language they acquired may be excellent, they may still have noticeable differences in their phonetics and phonology that mark them as non-native speakers. Often most noticeably these differences are in intonation, timing and other features of their prosody (Chapter 10). Despite the fact that intonation and rhythm are what infants react to first before they learn words and grammar, these language

components are frequently the last that adults acquire.

In linguistics, one common proposal to account for why it is so hard for adolescents and adults to acquire native-like phonological and prosodic patterns (i.e., to "lose their accent," to put it in colloquial terms), while young children are so successful in attaining native pronunciations in their first – and often a second or third – language ,is the **Critical Period Hypothesis (CPH)** also referred to as the "sensitive period" (see Chapter 14). Proponents of the CPH argue that there is a biologically determined period for language to be learned perfectly, and that only during that period can any language, first or second, be acquired naturally.

Lenneberg (a neurolinguist), proposed in 1967 that certain biological events related to language acquisition can only happen in an early stage of development termed the critical period and that children must receive an adequate and sufficient amount of linguistic input during the critical period in order for language development to proceed normally. He initially hypothesized that this period extends from age 2 to puberty and was based on loss of neural plasticity in the brain. But what are the implications of the CPH for second language acquisition?

There appear to be no simple or definitive answers to this question. A number of studies have shown that the notion of the nature of L2 acquisition changing suddenly and dramatically around the age of 12-13 due to changes in the brain is much too simplistic. There may be different critical periods for different language skills, for example, a critical period for acquiring unaccented speech (suggested to be as early as age 6), which might be different from the critical period for acquiring grammatical competence (which may be closer to puberty) or learning vocabulary. It may be that the exact age of first exposure is not such a central issue, particularly not in a formal learning context. In a recent test of the CPH for SLA, the most compelling finding was that the degree of success in SLA steadily declines throughout the life span (Hakuta et al. 2003). The pattern of decline, however, failed to be marked by a sharp drop at a particular age, which would be the essential hallmark of a critical period.

In L2 research and teaching, there is a trend today towards recognizing **suprasegmentals** (see Chapter 3) as potentially more important than **segmentals** for speaking comprehensibly and

for listening comprehension. Indeed, babies react to **prosody** (as well as facial expressions and gestures) well before they have learned words or language. Studies have shown that L2 learners who have received instruction and training in prosody speak more comprehensibly and fluently than those who have been trained only on segmental accuracy, focused on consonants and vowels (e.g., Derwing, Munro, & Wiebe 1998; Derwing & Rossiter 2003).

Many L2 learners comment that their language classes do not focus much on pronunciation. As a native Russian speaker learning English noted, "My English professors did not give enough attention to pronunciation … after living in the United States for a while, I realized that good pronunciation takes you a lot further than good grammar." It is true that some language teaching approaches have placed little or no emphasis on pronunciation, especially those focused primarily on translation of L2 reading materials and on grammar. This tendency still holds in foreign language contexts where assessment of foreign language skills is done largely through written exams. In recent years, however, approaches aimed at developing **communicative competence** have integrated pronunciation into listening and speaking skills. In addition to greater emphasis on the intonations and rhythms of a language, recent trends also stress helping learners develop strategies to improve pronunciation outside the classroom (see Textbox 15.2), such as extensive listening to gain familiarity with intonation and stress, as well as intensive practice on diagnosed problem areas along with monitoring of progress.

SIDEBAR 15.2

Communicative competence refers to both a speaker's grammatical competence (including a knowledge of the rules of grammar, vocabulary, pronunciation) and sociolinguistic competence (a knowledge of' rules of language use in culturally appropriate ways and the ability to effectively communicate or interact with speakers of the target language).

Although communicative language teaching approaches have de-emphasized "skill and drill" exercises, pronunciation is one area in which repeated practice can be beneficial, leading to automaticity.

SIDEBAR 15.3

As you have probably experienced, when you are trying to communicate meaning, it is very difficult to monitor your sound production at the same time. If you have learned an L2, which types of sounds did you need to practice repeatedly? Were there particular words or expressions you focused on in your practicing? (For example, an English learner practicing /r/ might practice conversational expressions such as *That's right* or *Really*? A Russian learner might practice stringing multiple consonants together at the beginning of a word to say здравствуйте 'hello.' And a German learner might practice producing the front rounded vowels marked by an umlaut in the orthography, so as to say *Das ist schön* 'That's nice' or *tschüss* 'bye, so long.')

In the teaching of English pronunciation, another recent development is the recognition that in this age of global Englishes, a variety of accents is acceptable. At the beginning of the 21st century, approximately three of every four users of English worldwide was a non-native speaker (Crystal 2003). We can assume, then, that much communication in English occurs among L2 speakers with different first languages and not between native and non-native speakers. A language put to this type of use is known as a *lingua franca*. While descriptions of English as a lingua franca (ELF; not to be confused with EFL, English as a Foreign Language) can include grammar, the lexicon, and pragmatics, pronunciation for ELF is of particular interest to those involved with language teaching and language policy. The notion of "correct pronunciation" based on accepted standards becomes less of an issue than describing what constitutes intelligible communication. For example, researchers have pointed out that some English sounds that are difficult for L2 speakers to produce, such as the 'th' sounds (ð and θ), are not really necessary for intelligible global communication (Seidlhofer 2005).

In addition to English there are, of course, many other languages used as lingua francas throughout the world. For example, Standard Cantonese is a lingua franca in Singapore and Malaysia as well as in Hong Kong and the Guangdong province of China. Urdu is an official language of India and a lingua franca of Pakistan.

SIDEBAR 15.4

Consider a language you have learned. What sounds do you think are difficult for non-native speakers to produce but perhaps not so important from the perspective of intelligibility? A good example might be the 'r' sound in many languages. If learners of Spanish, French, German, Farsi, or Arabic simply use the pronunciation of 'r' from their L1 when speaking English, they will probably be understood although noticeably non–native; the phonetic substitution is unlikely to compromise intelligibility. On the other hand, speakers of Japanese, a language that doesn't have a phonemic distinction between /r/ and /l/, can find it difficult to produce English /r/ and /l/ sounds distinctly. Communicative problems may arise because of the many English minimal pairs such as *light/right, bled/bread,* etc.

Lexicon/Vocabulary

Many people believe that vocabulary may be the most important aspect of any language that is being learned; if you don't know enough words, no amount of grammar knowledge will allow you to speak, read, or write the language. But how much vocabulary is needed to know in order to speak an L2? It depends on the purpose. Some estimate that for everyday conversation or for the purposes of reading a newspaper in English, we need to know approximately 2,000 words (Lightbown & Spada 2006); however, it depends on the content of the conversation and on the newspaper. Many first-year language textbooks claim to teach 2,000-3,000 words, but most of us have had the experience of being *unable* to hold a basic conversation or read a newspaper in an L2 even after studying the L2 for a year (at the college level). For English, it is estimated that the 2,000-3,000 most frequent words make up as much as 80-90 percent of most non-technical texts. But in typical L2 classrooms, particularly after the first year of instruction, much of the vocabulary that is taught is from literary works or for relatively specialized topics. Based on what typical students are able to read and say after two years of L2 study in the classroom, it is likely that learners actually need to know several thousand English words (4,000 perhaps) in order to converse about more than the weather, one's family, and the most basic of everyday activities.

SIDEBAR 15.5

A quick look at some first-year Spanish and German L2 textbooks used in the U.S. reveals that their glossaries contain between 1,500-6,300 words!

For many languages, researchers have determined which words are most frequently used in spoken and written discourse; the lists resulting from such analyses are used for teaching materials and self-study. For example, consider the sentence groups below taken from two Productive Levels Tests for English. The learner's task is to complete the partially spelled-out words.

2000-word level:

1. The rich man died and left all his we_____ to his son.

2. Teenagers often adm____ and worship pop singers.

3. La___ of rain led to a shortage of water in the city.

5000-word level:

1. This is a complex problem which is difficult to compr__.

2. We do not have adeq_____ information to make a decision.

3. She is not a child, but a mat_____ woman. She can make her own decisions.

 (Nation 2001: 425-427).

When learners try to guess the words, they undoubtedly use contextual cues: associated words (e.g., *rich* associates with *wealth*) or words that tend to occur with others (e.g., *lack of rain, adequate information*). In fact, to know a word means not just understanding individual meanings but knowing which words "go together" or collocate with others. Because theories of SLA are placing increasing importance on such **collocations** for developing proficiency, *L2 vocabulary teaching materials increasingly emphasize the learning of groups of words as sets, including collocations* (e.g., *light lunch, slight chance, endless supply, pretty much, right now*) *and lexical bundles* (*by the way, give me a break, I'd be happy to*). With the development of **corpus linguistics**, we now have a great deal of information about how words combine with other words in English as well as in many other languages. In addition, **corpus** analyses show which groups of words are common in different registers, such as casual conversation vs. academic prose. For example, analysis of a large corpus of conversational English identified the most frequent **lexical bundles**, defined as "recurrent expressions, regardless of their idiomaticity, and regardless of their structural status'' (Biber et al., 1999: 990). Here are a few examples that begin with the personal pronoun *I: I'm going to get, I'll have a look, I can't be bothered, I'll see what you, I can't remember what*. As you might imagine, the learning of lexical bundles and other word combinations such as collocations helps to produce idiomatic speech and to avoid odd pairings of words (e.g., *big solution, make a vacation, make a party*) that may result from L1 to L2 translation or from a limited L2 vocabulary.

One other area that corpus linguistics has contributed greatly to vocabulary study is showing us how vocabulary and grammar interact, often referred to as lexico-grammatical structure. Furthermore, these interactions often differ depending on the registers of language. Table 15.1 below gives examples from Biber et al. (1999: 478) of the most frequent verbs used in English passive voice in three different registers: conversation, journalism, and academic prose.

Register	Lexical Verb	Occurrences per million words
Conversation	*be done*	over 100
	be called	over 40
	be put	over 40
Journalism	*be expected*	over 200
	be said	over 100
	be held	over 100
Academic prose	*be made*	over 300
	be used	over 300
	be seen	over 300

Table 15.1. Frequency of Lexical Verbs with the Passive

As Table 15.1 indicates, both the lexical verbs and the frequencies of passive verbs vary across registers. For example, while *be done* (as in *It's gotta be done*) is the only verb in conversational English to occur more than 100 times per million words, passive verbs in academic prose (e.g., *This procedure should be repeated*) occur with much greater frequency. In fact, several other lexical verbs not listed here occurred more than 300 times per million words in the academic prose data. And most verbs listed for the journalism and academic prose registers were rarely used in passive form in conversational English. In sum, ***developing vocabulary knowledge involves not only word meanings but also awareness of grammatical forms in language use***.

As for learning L2 vocabulary, linguists have different views regarding which methods are most effective. Some believe that extensive reading (especially for pleasure, because it is more motivating) is the best way to learn vocabulary because the words are encountered in context (e.g., Krashen: 1989). Others believe that learners would need to encounter the same word between 6-10 times in order to actually learn the word (Zahar et al.: 2001), and therefore specific and targeted study/memorization/use of vocabulary is necessary. Another issue to consider is, according to studies, in order to read fluently (without constant, focused, painstaking effort), one needs to understand the meaning of between 90-95% of the words in a text! If learners need to look up every other word in assigned L2 texts, the size of their vocabulary may simply not be large enough, not to mention the fact that looking up so many words may be disruptive to comprehension. SLA researchers are continually studying the role that L2 vocabulary plays in the L2 reading process.

SIDEBAR 15.6

You might have opinions about effective methods for learning vocabulary, based on your personal experiences. For example, in your L2 classes, did you have to memorize long lists of (unrelated) vocabulary? Was it an effective way of increasing your vocabulary? Which ways of increasing your L2 vocabulary have worked best for you?

Of course *how much and what kind of vocabulary a learner needs depends on his or her learning goals*. If someone is learning Chinese for business purposes, particular terms related to the profession would be important as well as general vocabulary appropriate for "small talk" topics and a range of polite expressions to be used in social situations. In fact, there are special vocational language programs that focus on the vocabulary needed in professions such as nursing. Consider a person interested in learning German only to read scientific articles or someone studying Japanese only to study literature. These learners have very different vocabulary needs than someone who is learning, say, "survival" language for travel. Young people are often very interested in learning the current idioms and slang expressions of an L2 in order to communicate with others their own age; they don't want to sound like a textbook. Consider, for example, an oft-taught question in L2 classes: *What do you do in your free time?*

12

(in German: *Was machst du in deiner Freizeit?*). A learner of German who asked this question on a trip to Germany was laughed at because it sounded stilted and unnatural. Clearly, an important part of vocabulary learning and teaching in any language is considering the contexts and purposes of language use.

Grammar

In our discussion of vocabulary learning, we pointed out that the grammar of a language is not something that can be clearly separated from meanings in actual communication. The essential role of grammar in learning an L2 was emphasized by applied linguist Henry Widdowson, who stated, "Language learning is essentially grammar learning and it is a mistake to think otherwise" (1988: 154).

While many language learners associate the word *grammar* with language rules that characterize prescriptive usage, ***current approaches to the teaching and learning of L2 grammar emphasize not rules but rather meaningful and dynamic language systems that change over time***. What constitutes "correct" or appropriate grammar depends on a number of communicative variables. Thus, learners not only need to acquire grammatical forms but also to gain understanding of the meanings and uses of grammatical structures. To borrow an example from our last section, a learner of English acquiring the passive voice must know not only the forms of the structure in various tenses (e.g., *is written, is being written, has been written*) but also how the structure is used in written or spoken English, such as to put focus on the semantic **patient** (see Chapter 6, pp. XX) that is **given**, meaning the referent is already being discussed in the discourse (e.g., *The burglar was arrested yesterday*) or to avoid mentioning who is to blame for an action by omitting reference to the semantic **agent** (e.g., *Mistakes were made*). As another example, the modal verb *may* in English is an easy form to learn, but has several meanings, including permission (*you may leave*) and possibility (*it may rain*). Further, an English learner may discover that speakers in informal contexts often use another modal, *can*, and not *may*, to ask permission: *Can we go when we've finished our exam?* As these examples illustrate, acquiring the grammar of an L2 involves not just learning the forms, but also multiple meanings and appropriate uses of structures in communicative contexts.

Sensitivity to the communicative context is only one important factor in successful L2 acquisition. Another factor is the first language that the learner brings to the process. There are frequently errors that can be attributed to transfer from L1. For example, native speakers of Chinese or Korean learning English may omit the –s inflection for English plural nouns since their L1s do not normally mark for plural (e.g., * *I bought two book*.). Word order differences between languages account for many errors. A speaker of Farsi learning English, for example, might transfer that language's subject, object, verb pattern as well as the ordering of adjectives after nouns in producing English utterances (e.g., *I man old saw* for *I saw an old man.*) A native

speaker of English learning French may incorrectly place some adjectives, such as those denoting colors, before nouns instead of after them (e.g., *la blanche maison). It is also the case, however, that **many grammatical errors made by L2 learners are not caused by interference from L1 but are specific to the particular L2 being learned.** For example, in English some lexical verbs, such as *enjoy*, are followed by complement clauses where the verb is in the *-ing* (**gerund**) form, as in *I enjoy **reading** mysteries*, and do not take complements where the verb is in the infinitive (**I enjoy **to read** mysteries*). Many learners of English regardless of their L1s will make errors in using the wrong complements after such verbs until they acquire the correct structures.

Further evidence that the L1 is not the only factor contributing to errors in L2 production is that **L2 learners, regardless of their mother tongue, master certain grammatical morphemes in the same order as children learning that same language as an L1.** For example, L2 English learners in early stages of acquisition typically use the word *no* or *not* to negate utterances, placing it at the beginning of the utterance, as in *No have dog*; later they may use other forms combined with auxiliaries such as *don't*. The same pattern is attested in L1 acquisition of English. Another example is that learners of English may extend the regular past tense rule to irregular verbs, producing *teached* or *putted*, or apply the regular plural formation to irregular nouns, producing forms such as *teeths*. Again, these patterns are frequently found in the speech of children acquiring English. Native speakers of English make similar types of mistakes when learning other languages. For example, learners of Japanese sometimes apply the regular morphological rules of verbal negation (using the morpheme *–nai*) to the separate word class of adjectives, leading to forms like *atsui-nai* or *atsu-nai* for 'not hot' as opposed to the correct form *atsu-kunai*. Such mistakes are also found in the speech of children acquiring Japanese.

Another way that L2 acquisition can mirror processes of development of L1 is that acquisition does not always proceed in a linear fashion. Sometimes learners experience **U-shaped learning**, first producing a correct form, perhaps by imitation, then later producing an incorrect form after learning the grammatical system, and finally producing the correct form again once the exceptions to the rules have been learned or the grammatical system has been mastered. For example, in L1 acquisition, a child might produce the sequence: *I have more than you* (2 yrs.); *I have many-er than you* (3 yrs.); *I have more than you* (4 yrs.). Similarly, in adult L2 acquisition, a learner may say *She taught me English* early on, based on having heard the

form *taught*; then later, after learning to form the past tense with *-ed*, the learner might produce *She teached me English*; and finally, after learning that the verb *teach* is irregular, s/he will say *She taught me English*.

The over-generalization of grammatical rules and the observation of U-shaped learning patterns led to the development of an important concept in linguistic approaches to SLA, namely that of **interlanguage**, which *is the L2 language system created by a learner; this interlanguage is neither the L1 system nor the native-like L2 system, but something in between*. A learner's interlanguage is constantly changing, and is continually revised based on new words, forms, or structures that enter the system. It can be thought of as a continuum of a learner's evolving L2 language system, or even as a third language, with its own grammar, lexicon, and phonology. The key point is that it is the learner's language at a given point in time is formulated by a learner imposing structure on the available linguistic input, and is created as that learner's internalized system. As such, a learner's interlanguage can be seen as an important intermediate stage that is part of the language-learning process rather than as a system that is considered deficient. This allows greater tolerance for errors, as mistakes are considered to be steps in the evolving process of L2 mastery. Learners often experience, when learning an L2, that certain errors persist when they speak or write the language. This is called **stabilization** or **fossilization** and this may prevent the learner's L2 system from becoming native-like.

Cross-cultural issues and pragmatic interpretation

Chapter 8 introduced pragmatics as extra-linguistic competence, the ability to draw correct inferences based on the context of an utterance. ***Culture is a critical part of the extra-linguistic context, and there are many culturally-based expectations for how utterances should be interpreted.*** This fact is (often keenly) felt by second-language learners—and speakers of the target language who interact with them—when utterances intended in one way are interpreted in quite another.

      This can be true of conventionalized interactions, such as the exchange of greetings, where different greetings have different implications about the level of formality of the interaction and the social relationship between interlocutors. For example in the United States, the following greetings and responses are common:

How are you today?	*How're ya doin'?*	*What's up?*
I'm fine, thanks.	*I'm good.*	*Not much.*

How are you? can be used in more formal situations, resulting in the more formal and polite *I'm fine, thanks*, whereas *How's it going?* or *How're ya doin'?* are less formal and are often answered with *I'm good*. In the most informal settings, e.g., on college campuses, you might hear *What's up?* (and even '*Sup?*'), with a reply like *Nothin'* or *Hey*. Speakers immersed in the cultural context know that the question itself is often used as a greeting and is not intended to be interpreted as a true question about how the other person actually is; likewise, the responses are rather formulaic as well. An L2 hearer lacking this cultural context may not realize that the "question" is a standard greeting, but rather interpret it as a request for information. When coming from a stranger, e.g., a store cashier, s/he may either feel affronted by the question or proceed to give a full and complete answer about how s/he really is doing that day, surprising the cashier! A similar mistake can be made by American speakers in other cultural contexts. For example in Spain, when people ask *¿Qué tal?* they are often using it as a genuine request for information and expression of interest in the other person, so when an American answers *Nada* ("nothing"), the response could be perceived as cold, rude, and insensitive.

Missed interpretations can also occur in other conventionalized interactions, such as the giving and receiving of compliments, or the acceptance or refusal of a date. People draw inferences on intended meanings based on the interactional norms of their native cultures, and they respond accordingly, sometimes in ways that are inappropriate or misinterpreted in the foreign cultural context. The following examples, taken from observations by students in the United States, illustrate typical cases:

- Japanese: When a Japanese teacher complimented an American student, the student said *Thank you!* but later realized that this was inappropriate to a compliment in a Japanese context, where it is considered polite to deny a compliment, as the speaker then appears more humble.

- Persian: When a Persian student said to an American, *Wow, you've gotten big/fat*, it was intended as a compliment, meaning 'You look healthy/good'. The culturally-based intended interpretation is that fat indicates a lack of illness. In the U.S. cultural context, however, being fat is considered by many to be unhealthy and unbecoming, so the statement was interpreted as an insult.

- Hungarian: When a Hungarian woman was invited to go on a date by an American man, she said *No, I can't; I'm busy*. He said, *Okay, maybe next time*. But in Hungarian culture, he was supposed to keep asking and trying to persuade her to go out with him. She expected him to interpret her utterance in that way, and was disappointed when he didn't persist.

- Japanese: A Japanese man asked an American woman if she liked a certain food. It was his way of asking her out, following cultural norms in Japan. Lacking this extra-linguistic cultural context, she responded honestly to the linguistic meaning of the utterance, saying *No, I don't like that food*. Not knowing that she did not make his intended pragmatic interpretation, he assumed from her response that she did not want to go out with him.

Missed interpretations based on different cultural assumptions are not limited to conventionalized interactions. This is especially true when people prefer to be indirect:

- Japanese: A student arrived late to Japanese class, and when the teacher commented *You seem to be very busy*, she was expecting the student to offer an explanation of why the student was late. Without the shared cultural background that would indicate that this was an indirect request for explanation, the student found the comment to be confusing.
- Italian: An American student's Italian roommates kept asking her *Aren't you hot?* whenever she wore boots and jeans during the summer. They were trying to imply that she was inappropriately dressed, based on their cultural assumptions about seasonally appropriately clothing, which she did not share. She was not able to interpret their questions as suggestions that she dress differently.

One aspect of language use where people frequently encounter difficulty has to do with determining the appropriate level of formality. Speakers who want their linguistic forms to be interpreted as polite and well-meaning may mistakenly appear either overly formal and cold, or overly informal and presumptuous. We can see this in the examples below, from L2 writers sending emails to the editors of a scholarly journal; some were overly formal and others were far too informal:

- L1 Arabic: *It honours me to send my manuscript to consider for publication in your estimable journal.*
- L1 Korean: *Dear editors, it you possibly find a time to review my attached file and give a feedback to my current concern above, it would really be appreciated, sir.*
- L1 Persian: *I entreat you to consider my humble paper as an attachment for publication. I hope these few lines find you in the best of your health.*
- L1 Persian: *i have written an article … and now I wanna submit it in one ELT journals. how can I submit it in your journal? plz send some information.*
- L1 Chinese: *Dear Editor, Please check this article.*
- L1 Chinese: *Dear Professor, Thank you very much for your immediate response and your exciting website. Wish you a healthy body and a happy life.*

One recent development in the teaching of pragmatics for L2 learners is a greater emphasis on the bi-cultural or multi-cultural identities that many speakers of other languages possess. That is, although learners need to be aware of practices that are potentially offensive or off-putting to people of the L2 culture, as illustrated in some of the examples above, speakers do not necessarily need to adopt all L1 communicative norms with those of the L2. One example might be the response to compliments. An American woman might respond to a compliment about a personal item such as clothing with a comment like *Oh, yes, I just love it!* In another cultural context, such a response might be interpreted as bragging or in another unintended way. A woman who feels uncomfortable responding in such a way should not feel she needs to give up her L1 norm of responding, as long as it is not objectionable and does not elicit interpretations that she did not want to make. Or she might combine some part of an L2 manner of response with that of her L1. Thus, learning the pragmatics of an L2 becomes an additive experience rather than one that replaces L1 with L2, creating a more complex (in the good sense) and richer identity for the language learner. However, ideally, the learner should be making conscious choices about appropriate forms to use in social situations and not "default" L1 forms resulting from a lack of knowledge about the L2.

Cognitive processing issues in SLA

First and second-language acquisition are important fields of study not only within linguistics but also within the field of psychology. The term **psycholinguistics** is used to indicate the intersection of these fields, including the acquisition of language. Since language acquisition is a cognitive process, it is also of great interest to those who study **cognitive linguistics**. Different people use different cognitive strategies in the process of L2 acquisition. For example, some people consciously think through nearly everything they are going to say before saying it, mentally translating from their L1 into the L2 before speaking or writing, thus monitoring their production. Others may use "chunks" of language or grammatical formulas in the construction of sentences. These represent different learning processes that can vary across individuals or that can be used by a single individual at different points in the L2 acquisition process. There are also different ways in which language is comprehended, including "top-down" processing where learners are able to reach a basic level of comprehension of an utterance without understanding every word, and "bottom-up" processing where comprehension proceeds more slowly as learners focus on individual words or morphemes, which can be an obstacle to the comprehension of the whole. It is interesting to consider the implications of these differences and what they reveal about learning and about human cognition.

Before considering these implications, it is important to understand the historical context out of which the field of psycholinguistics developed. Until the middle of the 20th century, **behaviorism** was a dominant theory within the field of psychology. With regard to L1 learning, it was thought that children learn the language of their environment by imitating, needing to communicate, and being reinforced and rewarded when they are understood and have successfully gotten their message across. Applied to L2 learning, the theory suggests that if a learner hears a stimulus in an L2 and repeats the word or sentence enough times, it will become a habit and can then be used to communicate successfully. However, as theories of psychology evolved in the late 20th century, there was a reaction against behaviorist theories. In SLA, this entailed a movement towards cognitive theories, including a shift in focus from the learner's *external* environment to the individual's *internal* thought processes. ***In the cognitive tradition,***

the focus is on the central role of the human mind in processing linguistic data that is heard or received as input, with a reduced role for repetition and habit formation.

Some psychologists and psycholinguistics who study cognition and learning (in particular, information processing) theorize that L1 learning is just another cognitive skill that humans are able to master (like learning to play the piano or learning math). ***They believe that language learning involves general cognitive abilities and basic information-processing mechanisms in the brain.*** SLA is viewed as the acquisition of complex skills, and, like learning to play a sport or a musical instrument, the role of **automaticity** is of great importance. The goal of SLA is for the learner to be able to process linguistic input and output quickly, unconsciously, and effortlessly, i.e., automatically, without having to think about each word or step in the process. To do this, the learner begins with controlled processing, in which the associations have not yet been built up by repeated use and so require conscious attention. With time and experience, learners begin to use language more automatically. Language processing is also believed to be highly dependent upon input frequency, with frequency effects found in the processing of phonology, lexis, grammaticality, syntax, and formulaic language production (Ellis, 2002). The effects of frequency of exposure and input have been studied in first and second language acquisition, and help explain, for example, the variance of morpheme acquisition order. But ***the main question is how learners move from knowledge of the examples received as input to automatically producing language; for SLA, this question remains unanswered***.

There seem to be a number of different mechanisms at work as learners automate their L2 production. Two important mechanisms proposed in the SLA literature are the **monitor** and the **affective filter**. The monitor is the learner's cognitive "watchdog" that consciously reviews what the learner has said in the L2 and *monitors* it for correctness. The affective filter is the emotional component of an L2 learner's conscious learning process, which involves how comfortable or uncomfortable s/he is when speaking an L2. When trying to speak a foreign language, many learners have the experience of not wanting to sound stupid. In acute cases of discomfort, the affective filter would be "high" and the learner would find it difficult to communicate in the language.

TEXTBOX 15.4. **Monitoring L2 speech**

Just as the affective filter mechanism might differ greatly from one L2 learner to another, some learners monitor themselves better than others. The disadvantage of monitoring too closely or carefully is that speakers may not say as much as they would like. Perhaps even worse, speakers might take so much time to think about their correct L2 usage that the conversation may have moved on to another topic before they have the chance to utter a sentence!

SIDEBAR 15.8

In thinking about your L2 learning experiences, do you ever feel self-conscious about speaking the L2? Do you worry about sounding stupid? Do you know gregarious people who will gab in an L2 "fluently" while making lots of grammatical mistakes?

SIDEBAR 15.9. **The Interaction Hypothesis**

The Interaction Hypothesis states that: "*Negotiation for meaning*, and especially negotiation work that triggers *interactional* adjustments by the [Native speaker] or more competent interlocutor, facilitates acquisition because it connects input, internal speaker capacities, particularly selective attention, and output in productive ways" (Long 1996: 451-452).

Another mechanism that learners use in the process of SLA is **negotiation**, a specific type of interaction where L2 learners explicitly signal that they do not understand something and the interlocutor provides input as an attempt to clarify and facilitate their understanding. This is part of a broader theory known as the **Interaction Hypothesis**, proposed by Long (1996). These kinds of interactions are important for developing communicative competence and are interrelated with the social aspects of SLA, to be discussed in the next section.

Many examples of negotiation can be found in transcripts of computer-mediated communication. For example, in a negotiation between a native speaker of Spanish and a learner of Spanish, the learner (Speaker Y) did not understand the Spanish word *común*, which the native speaker (Speaker X) used (Blake 2000:125):

23

X: *Cuales son en común?*

[What are in common?]

Y: *como se dice comun en igles? no comprehende*

[How do you say "common" in English?... no understand]

X: *común es cuando algo y una otra algo son el mismo; entiendes mi explicacion?*

["Common" is when something and another thing are the same; do you understand my explanation?]

Y: *si, gracias...*

[Yes, thank you.]

In addition to such mechanisms, a host of individual learner differences are also factors in acquisition and learning. Among them is a wide array of differences in cognitive styles (e.g., verbal vs. visual vs. auditory vs. kinesthetic learners), learning styles (inductive vs. deductive)**,** personality (e.g., introvert vs. extrovert)**,** aptitude, age, motivation (e.g., instrumental vs. integrative), and affect (e.g., insensitive vs. empathetic). Some of these factors will be discussed in the next section.

In sum, this section has introduced some of the cognitive mechanisms that facilitate L2 comprehension and production. SLA learning processes vary across individuals, share features with other types of learning, and are both embedded in and mediated by social interaction. We turn to a fuller exploration of the latter in the next section.

Sociocultural and Affective Aspects of SLA

Because language is inherently interactional, the social and affective aspects of communication are significant factors in the process of L2 learning. This section will consider the importance of social interaction for SLA, sociocultural theories as applied to SLA, and individual differences among learners, such as personality differences, willingness to take risks, and opinions about language learning.

As seen in the preceding section, the Interaction Hypothesis posits that social interaction is an important factor in SLA. Many important pedagogical methods rely on social interaction as a medium of teaching and learning. Since the late 1970s, the input-interaction-output theory of SLA has been central in providing many insights into second language learning and teaching, or "instructed SLA." Simply put, the model proposes that language acquisition is strongly facilitated by learners using the target language in interaction. In particular, when learners actively negotiate meaning in an L2 with a communicative partner, they benefit from experience with both comprehensible input and output through interaction. Input includes all language that a learner hears or reads through either informal or formal learning; output is simply the language that the learner produces, either speaking or writing Activities in which students are given tasks to complete that require meaningful verbal interaction draw on this model. In collaborative tasks, learners are assigned a goal and must communicate using whatever linguistic or extra-linguistic resources they have to achieve the intended outcome.

In the mid-1990's some scholars moved to a more enriched theoretical approach to SLA, believing that the input-interaction-output model did not sufficiently explain how second languages are learned in that it was rooted in cognitive and interactionist SLA theory. Sometimes referred to as the "social turn in SLA," these enriched approaches were based in large measure on the **sociocultural theories** of Vygotsky and Bakhtin. The underlying premise of these theories is that language is predominantly a social tool and as such is developed through interaction between and among communicators. The key notion is that language use does not take place in a vacuum but in real social contexts. When applied to SLA, the implication is that language instructors must allow L2 learners to become active participants in the target language culture, while SLA theorists should investigate how participation in a variety of sociocultural contexts affects the learner's L2 ability.

It is important to note that cognitive, linguistic, and social factors *all* play significant roles in linguistic use, choice, and development. An L2 learner's interlanguage is a variable linguistic system and is ***created by the interaction of both social factors and cognitive processes***. Consider for a moment that when speaking an L1, we do not speak in the same way with all of our conversation partners. We might even speak differently to our mothers than we

would to our fathers, not only in terms of the topics we discuss, but possibly also in our choice of vocabulary, tone of voice, or intonation. Similarly, for L2 learners, social variables such as who the interlocutor is (instructor vs. classmate; native vs. non-native speaker of the L2), the topic of discussion (everyday conversation vs. literary discussion), the social situation surrounding the discourse (classroom setting vs. authentic encounter), and the interactional norms of a given community or type of communication (what is expected in a service encounter in different countries, e.g., the extent to which a store clerk offers help or advice), *all* have an influence on our choice of linguistic forms.

SIDEBAR 15.10

Based on your own language-learning experience, how important do you think it is to interact with native speakers of an L2? How important has it been for you to have conversations with others in the L2 (e.g., in an L2 class)? Was it helpful for you to speak with other L2 learners, or were you worried that you would hear and learn their mistakes?

Finally, we would be remiss if we did not mention the role of culture in L2 teaching and learning at least briefly. It's safe to say that most language learners and teachers believe that developing an understanding of the L2 culture is an integral part of language learning. The following excerpt from a student's language learning history supports this belief:

> *The [Chinese] professors incorporated a lot of authentic materials to generate interest in the language and culture we were studying. This included samples of authentic foods to mark special occasions on the Chinese calendar and teaching us folk songs. My French teachers also adopted this approach by teaching us songs, having us read newspaper articles, and introducing us to classic art and cinema.*
>
> Meredith, native English speaker

During the past few decades, however, applied linguists have challenged many of the traditional ways of teaching culture in language classrooms, pointing out that "culture" is a much

more complex topic than merely introducing different kinds of food, holidays, popular songs, or points of interest in different countries. They have raised questions as to how we can teach the culture of countries which themselves have such great diversity. If, for example, we are teaching about American culture, how do we deal with the tremendous variety involving different ethnic groups, age groups, parts of the country (e.g., the deep south vs. the Pacific northwest), different lifestyles (e.g., urban vs. rural culture) and so on.

In addition to the dangers of stereotyping or misrepresenting cultures, some theorists of foreign language teaching believe that how much L2 culture should be taught depends on the learners' goals. McKay, an applied linguist who has been concerned with the teaching of English as an international language, stresses that language teachers abroad need to be aware of the learning needs and native cultures of the students. She suggests that some aspects of an L2 culture may be uninteresting or irrelevant to learners. As an example she discusses a textbook lesson concerned with garage sales, and questions whether this is useful to learners in countries where people do not sell their used possessions in this way. Language teachers also need to be aware that English as an international language, by its very definition, does not belong to a single culture, so it is difficult to decide which culture should be taught (McKay 2000). All of this does not mean that culture is not an important part of language learning but that the teaching of it requires sensitivity and respect.

SIDEBAR 15.11

Considering other languages and cultures with which you are familiar, can you think of cultural differences between subgroups of speakers of the language? What aspects of the culture would you choose to teach in a second language classroom?

Chapter summary

Anyone who has ever tried to learn a language has probably experienced the excitement of being able to understand and communicate with speakers of another language. Most of us

have also experienced the difficulties and frustrations of not being as fluent or proficient in an L2 as we are in our native language. The field of second language acquisition is relatively new (only about a half century old) and is still grappling with the questions of how learners create a new language system (their interlanguage) with only limited exposure to an L2, what parts of an L2 are learned, and what is not learned, or is more difficult to learn. Since language is a complex human phenomenon, with physical, cognitive, and sociocultural dimensions, understanding language learning will require us to take all of these dimensions into account, although some may be more relevant for the explanation of particular phenomena than others. As we have seen, the main approaches to the study of SLA have been influenced by linguistics, psychology, and most recently, by sociocultural theory, but the process of SLA is complex and there are still no definitive answers as to why most people do not master other languages as well as their first. Nevertheless, linguistic research continues to deepen our understanding of the processes of first and second language acquisition, and the field of applied linguistics continues to act upon this growing knowledge base in order to develop approaches and materials that will facilitate SLA.

Exercises

1. With one or more classmates, take turns interviewing each other about your language learning experiences using the questions raised in the sidebars of this chapter, either in class or on a class website. If one of you has not studied another language, you could consider the questions in regard to someone you know, such as a relative or friend.

2. Think of the most effective foreign language teacher you have ever had.
      a. What were the most effective things the teacher did to help you learn?
      b. What were the most important/effective things in the textbook or course materials?
      c. What did *you* have to do in order to learn the language?

3. Phonology/Pronunciation

Identify an L2 speaker of a language that you speak well. Record him/her either talking in a conversation or narrating a brief story. Describe any phonetic differences that mark the speech as non-native, including reference to vowels, consonants, melody, rhythm, and stress.

4. Lexicon/Vocabulary

Search the internet for a list of the 2000 most common words in one of the languages that you have studied or learned. About how many of these words do you know? How proficient do you feel in this language? Do you feel that your proficiency can essentially be measured by the number of vocabulary words that you know, or are other factors involved?

5. Grammar/Morphology

In the transcript below, an adolescent learner of English is telling a story to a listener, using the book, *A Boy, a Dog, a Frog and a Friend*, which has illustrations but no words. What grammatical errors can you identify? If you were an ESL tutor for this learner, what types of things might you focus on for a language lesson?

> *One day a little boy went to the lake and he was fishing. Suddenly he felt something fall into the lake and he was pulled into the lake and he falled into water. And his dog and his friend frog also jumped into the lake. And then he found… other side of the lake he met a big turtle. And they followed the turtle. His friend, the dog? I don't know if that's the thing. He was talking to the turtle and they… the turtle was so … the turtle and the dog fought each other and turtle bite dog's foot. The turtle couldn't open mouth, open his mouth and boy tried to help dog. But, turtle never open his mouth so they decided to take the turtle with his dog. And the boy and dog and frog, and they went back the other side of the lake. And the turtle was disappears. the turtle was in the water but again the turtle bite bites the dog's tail and the dog falled fall into the water again.*

6. Pragmatics

A special area of pragmatics research, called L2 developmental pragmatics, considers how learners develop the ability to respond in an L2 to social situations such as ones involving making requests, complaints, and apologies. One study (Beebe and Waring 2005) asked English adult learners how they would respond to insults in several situations. The researcher asked their subjects to write down what they "thought they would say" using actual words, not descriptions, in response to rudeness. In one situation, "the bookstore situation," the customer is told by a rude clerk, *If you want to browse, go to the library*. The following are responses that two subjects gave. Which do you think was stated by the lower proficiency learner and which by the higher proficiency learner? Why? How would you characterize these very different responses? Could factors other than proficiency level explain the difference?

> Response A: *Of course I have the right to have a look before I buy it. But now I changed my mind. I am not going to buy anything from your store.*
>
> Response B: *I see. I am going to the library.*

7. Psychological/Cognitive issues in SLA

Think of the L2 you have learned most recently. Do you mentally translate word for word from your L1 into your L2 before speaking or writing? Do you find it easier to learn "chunks" of language or to learn grammar rules so that you can construct your own sentences? Look at your textbook to see how much of the vocabulary is taught in "chunks" or "collocations" and how much is taught in lists. How are vocabulary lists organized, by part of speech, by topic, or otherwise? Is this organization helpful for your learning style, or would a different strategy be better?

8. Here are several more excerpts from language learning histories written by college students. Discuss each in terms of concepts or principles you learned about in this chapter, such as the importance of learning contexts (e.g., classroom vs. "real world" settings), the distinction between learning and acquisition, negotiated learning, or other concepts you think are relevant. How do these experiences compare with any you have had?

Excerpt 1 (Learner of Spanish, Native Speaker of English)

[N]othing helped me as much with my fluency as when my friend and I vacationed in Chile last year. The country has a low English-speaking population and my companion spoke no Spanish, so I was responsible for reading the signs and menus, and speaking with people for directions. Just walking through the airport gave me opportunies to interact with native speakers in ways I never had before –finding baggage claim, renting a car, and finding the hostel. Even though I had not spoken Spanish regularly in almost two years, after only a few days in Chile, I began to notice that I was thinking directly in Spanish and was no longer relying on English as my crutch.

Excerpt 2 (Learner of Swedish, Native Speaker of English)

When I studied abroad in Sweden for four months, I was given an amazing opportunity to learn a language in its native country… My hallmates… encouraged my Swedish and taught me slang terms and other necessary vocabulary, but the language that comes most naturally and comfortably to me now is what I used in daily life when I was alone or trying out my Swedish on unsuspecting clerks.

Excerpt 3 (Learner of English, Native Speaker of Arabic)

A few months after I graduated from high school I had the opportunity of a lifetime … I was issued a visa to come to the USA… my best friends at the time were English dictionary and grammar books; I have to say they didn't help me get that far away. I needed the type of language that would help me survive and get things done in the real world. A few weeks later I got a job as a cook in a fancy restaurant. I had to improve my listening comprehension to properly take orders from waiters, and to improve my reading speed to go quickly through the cook book. Basically, I had no time to write everything I hear, and definitely no time to analyze the perceived and produced English. I had to take the language as it is, with no further analysis.

Suggestions for Further Reading

Brown, H. D. 2009. *Principles of language learning and teaching*, 5th ed. New York: Pearson Longman.

> This is a thorough introduction to second language teaching and learning that also includes chapters on first language acquisition, individual differences in second language learning, sociocultural factors and cross-linguistic influences, and theories of SLA.

Lightbown, P. & N. Spada. 2006. *How languages are learned,* 3rd ed. Oxford University Press.

> This is a very readable introduction to second language acquisition that also discusses learning and teaching in the second language classroom.

Saville-Troike, M. 2012. *Introducing Second Language Acquisition*, 2nd ed. Cambridge University Press.

> This is a concise and clear introduction to the basic principles of second language acquisition and contains activities at the end of each chapter to check learners' comprehension.

References

Beebe, L. & H.Z. Waring. 2005. "Pragmatic development in responding to rudeness." In Frodesen, J. & Holten, C. (eds.), *The power of context in language teaching and learning*. Boston: Heinle Thomson. 67-76.

Biber, D., S. Johansson, G. Leech, S. Conrad, and E. Finegan. 1999. *Longman grammar of spoken and written English*. Harlow: Pearson.

Blake, R. J. 2000. "Computer mediated communication: A window on L2 Spanish interlanguage." *Language Learning & Technology* 4.1. 120-136.

Crystal, D. 2003. *English as a global language,* 2nd ed. Cambridge University Press.

Derwing, T. M., M. J. Munro, and G. E. Wiebe. 1998. "Evidence in favor of a broad framework for pronunciation instruction." *Language Learning* 48. 393-410.

Derwing, T. M. & M. J. Rossiter. 2003. "The effects of pronunciation instruction on the accuracy, fluency, and complexity of L2 accented speech." *Applied Language Learning* 13. 1-17.

Ellis, N. C. 2002. "Frequency effects in language processing." *Studies in Second Language Acquisition* 24. 143-188.

Hakuta, K., E. Bialystok, and E. Wiley. 2003. "Critical evidence: A test of the critical period hypothesis for second language acquisition." *Psychological Science* 14.1. 31-38.

Krashen, S.D. 1989. "We acquire vocabulary and spelling by reading: Additional evidence for the Input Hypothesis." *The Modern Language Journal* 73. 440-464.

Long, M. (1996). "The role of the linguistic environment in second language acquisition." In Ritchie, W. & Bhatia T. (eds.), *Handbook of second language acquisition*, pp. 413-468. San Diego: Academic Press.

Lightbown, P. & N. Spada. 2006. *How languages are learned,* 3rd ed. Oxford University Press.

McKay, S. 2000. "Teaching English as an international language: Implications for cultural materials in the classroom." *TESOL Journal* 9.4. 7-10.

Nation, I. S. P. 2001. *Learning vocabulary in another language*. Cambridge University Press.

Seidlhofer, B. 2005. "English as a lingua franca." *ELT Journal* 59.4. 339-341.

Widdowson, H. G. 1988. "Grammar, nonsense and learning." In Rutherford, W. & M. Sharwood Smith. (eds.), *Grammar and second language teaching.* New York: Newbury House.

Zahar, R., T. Cobb, and N. Spada. 2001. "Acquiring vocabulary through reading: effects of frequency and contextual richness." *Canadian Modern Language Review* 15.4. 541-572.