When you were still a very young child, you began acquiring at least one language — what linguists call your L1 — probably without thinking much about it, and with very little conscious effort or awareness. Since that time, you may have acquired an additional language — your L2 — possibly also in the natural course of having the language used around you, but more likely with the same conscious effort needed to acquire other domains of knowledge in the process of becoming an “educated” individual. This book is about the phenomenon of adding languages. In this introductory chapter, I will define a few of the key terms that we will use and present the three basic questions that we will explore throughout the book.
Second Language Acquisition (SLA) refers both to the study of individuals and groups who are learning a language subsequent to learning their first one as young children, and to the process of learning that language. The additional language is called a second language (L2), even though it may actually be the third, fourth, or tenth to be acquired. It is also commonly called a target language (TL), which refers to any language that is the aim or goal of learning. The scope of SLA includes informal L2 learning that takes place in naturalistic contexts, formal L2 learning that takes place in classrooms, and L2 learning that involves a mixture of these settings and circumstances. For example, “informal learning” happens when a child from Japan is brought to the US and “picks up” English in the course of playing and attending school with native English-speaking children without any specialized language instruction, or when an adult Guatemalan immigrant in Canada learns English as a result of interacting with native English speakers or with co-workers who speak English as a second language. “Formal learning” occurs when a high school student in England takes a class in French, when an undergraduate student in Russia takes a course in Arabic, or when an attorney in Colombia takes a night class in English. A combination of formal and informal learning takes place when a student from the USA takes Chinese language classes in Taipei or Beijing while also using Chinese outside of class for social interaction and daily living experiences, or when an adult immigrant from Ethiopia in Israel learns Hebrew both from attending special classes and from interacting with co-workers and other residents in Hebrew.

In trying to understand the process of second language acquisition, we are seeking to answer three basic questions:

(1) **What** exactly does the L2 learner come to know?
(2) **How** does the learner acquire this knowledge?
(3) **Why** are some learners more successful than others?

There are no simple answers to these questions – in fact, there are probably no answers that all second language researchers would agree on completely. In part this is because SLA is highly complex in nature, and in part because scholars studying SLA come from academic disciplines which differ greatly in theory and research methods. The multidisciplinary approach to studying SLA phenomena which has developed within the last half-century has yielded important insights, but many tantalizing mysteries remain. New findings are appearing every day, making this an exciting period to be studying the subject. The continuing search for answers is not only shedding light on SLA in its own right, but is illuminating related fields. Furthermore, exploring answers to these questions is of potentially great practical value to anyone who learns or teaches additional languages.

SLA has emerged as a field of study primarily from within linguistics and psychology (and their subfields of applied linguistics, psycholinguistics, sociolinguistics, and social psychology), as a result of efforts to answer the
what, how, and why questions posed above. There are corresponding differences in what is emphasized by researchers who come from each of these fields:

- Linguists emphasize the characteristics of the differences and similarities in the languages that are being learned, and the linguistic competence (underlying knowledge) and linguistic performance (actual production) of learners at various stages of acquisition.
- Psychologists and psycholinguists emphasize the mental or cognitive processes involved in acquisition, and the representation of language(s) in the brain.
- Sociolinguists emphasize variability in learner linguistic performance, and extend the scope of study to communicative competence (underlying knowledge that additionally accounts for language use, or pragmatic competence).
- Social psychologists emphasize group-related phenomena, such as identity and social motivation, and the interactional and larger social contexts of learning.

Applied linguists who specialize in SLA may take any one or more of these perspectives, but they are also often concerned with the implications of theory and research for teaching second languages. Each discipline and subdiscipline uses different methods for gathering and analyzing data in research on SLA, employs different theoretical frameworks, and reaches its interpretation of research findings and conclusions in different ways.

It is no surprise, then, that the understandings coming from these different disciplinary perspectives sometimes seem to conflict in ways that resemble the well-known Asian fable of the three blind men describing an elephant: one, feeling the tail, says it is like a rope; another, feeling the side, says it is flat and rubbery; the third, feeling the trunk, describes it as being like a long rubber hose. While each perception is correct individually, they fail to provide an accurate picture of the total animal because there is no holistic or integrated perspective. Ultimately, a satisfactory account of SLA must integrate these multiple perspectives; this book is a step in that direction. As in the fable of the elephant, three different perspectives are presented here: linguistic, psychological, and social. I make no presumption that any one perspective among these is ‘right’ or more privileged, but believe that all are needed to provide a fuller understanding of the complex phenomena of SLA.

What is a second language?

I have broadly defined the scope of SLA as concerned with any phenomena involved in learning an L2. Sometimes it is necessary for us to make further distinctions according to the function the L2 will serve in our lives, since this may significantly affect what we learn. These differences may determine the specific areas of vocabulary knowledge we need, the level of grammatical complexity we have to attain, and whether speaking or reading
skills are more important. The following are distinctions commonly made in the literature:

- **A second language** is typically an official or societally dominant language needed for education, employment, and other basic purposes. It is often acquired by minority group members or immigrants who speak another language natively. In this more restricted sense, the term is contrasted with other terms in this list.
- **A foreign language** is one not widely used in the learners’ immediate social context which might be used for future travel or other cross-cultural communication situations, or studied as a curricular requirement or elective in school, but with no immediate or necessary practical application.
- **A library language** is one which functions primarily as a tool for further learning through reading, especially when books or journals in a desired field of study are not commonly published in the learners’ native tongue.
- **An auxiliary language** is one which learners need to know for some official functions in their immediate political setting, or will need for purposes of wider communication, although their first language serves most other needs in their lives.

Other restricted or highly specialized functions for ‘second’ languages are designated **language for specific purposes** (such as French for Hotel Management, English for Aviation Technology, Spanish for Agriculture, and a host of others), and the learning of these typically focuses only on a narrow set of occupation-specific uses and functions. One such prominent area is **English for Academic Purposes** (EAP).

### What is a first language?

There is also sometimes a need to distinguish among the concepts **first language**, **native language**, **primary language**, and **mother tongue**, although these are usually treated as a roughly synonymous set of terms (generalized as L1 to oppose the set generalized as L2). The distinctions are not always clearcut. For purposes of SLA concerns, the important features that all shades of L1s share are that they are assumed to be languages which are acquired during early childhood – normally beginning before the age of about three years – and that they are learned as part of growing up among people who speak them. Acquisition of more than one language during early childhood is called **simultaneous multilingualism**, to be distinguished from **sequential multilingualism**, or learning additional languages after L1 has already been established. (‘Multilingualism’ as used here includes bilingualism.) Simultaneous multilingualism results in more than one “native” language for an individual, though it is undoubtedly much less common than sequential multilingualism. It appears that there are significant differences between the processes and/or results of
language acquisition by young children and by older learners, although this is an issue which is still open to debate, and is one of those which we will explore in chapters to follow.

**Diversity in learning and learners**

As already noted, the circumstances under which SLA takes place sometimes need to be taken into account, although they are perhaps too often taken for granted and ignored. What is learned in acquiring a second language, as well as how it is learned, is often influenced by whether the situation involves informal exposure to speakers of other languages, immersion in a setting where one needs a new language to meet basic needs, or formal instruction in school, and these learning conditions are often profoundly influenced by powerful social, cultural, and economic factors affecting the status of both languages and learners.

The intriguing question of why some L2 learners are more successful than others requires us to unpack the broad label “learners” for some dimensions of discussion. Linguists may distinguish categories of learners defined by the identity and relationship of their L1 and L2; psycholinguists may make distinctions based on individual aptitude for L2 learning, personality factors, types and strength of motivation, and different learning strategies; sociolinguists may distinguish among learners with regard to social, economic, and political differences and learner experiences in negotiated interaction; and social psychologists may categorize learners according to aspects of their group identity and attitudes toward target language speakers or toward L2 learning itself. All of these factors and more will be addressed in turn in the following chapters.
Questions for self-study

1. Match the following terms to their definitions:
   1. target language  a. has no immediate or necessary practical application, might be used later for travel or be required for school
   2. second language  b. the aim or goal of language learning
   3. first language   c. an officially or societally dominant language (not speakers’ L1) needed for education, employment or other basic purposes
   4. foreign language d. acquired during childhood

2. The underlying knowledge of language is called __________.
3. Actual production of language is called __________.

Active learning

1. List all of the languages that you can use. First classify them as L1(s) and L2(s), and then further classify the L2(s) as “second,” “foreign,” “library,” “auxiliary,” or “for special purposes.” Finally, distinguish between the ways you learned each of the languages: through informal exposure, formal instruction, or some combination of these.
2. Do you think that you are (or would be) a “good” or a “poor” L2 learner? Why do you think so? Consider whether you believe that your own relative level of success as a language learner is due primarily to linguistic, psychological, or social factors (social may include type of instruction, contexts of learning, or attitudes toward the L1 and L2).
Most of us, especially in countries where English is the majority language, are not aware of the prevalence of multilingualism in the world today, nor the pervasiveness of second language learning. We begin this chapter with an overview of these points, then go on to explore the nature of language learning, some basic similarities and differences between L1 and L2 learning, and “the logical problem of language acquisition.” An understanding of these issues is a necessary foundation for our discussion of linguistic, psychological, and social perspectives on SLA in the next chapters. We follow this with a survey of the theoretical frameworks and foci of interest which have been most important for the study of SLA within each of the three perspectives.
Multilingualism refers to the ability to use two or more languages. (Some linguists and psychologists use bilingualism for the ability to use two languages and multilingualism for more than two, but we will not make that distinction here.) Monolingualism refers to the ability to use only one. No one can say for sure how many people are multilingual, but a reasonable estimate is that at least half of the world's population is in this category. Multilingualism is thus by no means a rare phenomenon, but a normal and common occurrence in most parts of the world. According to François Grosjean, this has been the case as far back as we have any record of language use:

[B]ilingualism is present in practically every country of the world, in all classes of society, and in all age groups. In fact it is difficult to find a society that is genuinely monolingual. Not only is bilingualism worldwide, it is a phenomenon that has existed since the beginning of language in human history. It is probably true that no language group has ever existed in isolation from other language groups, and the history of languages is replete with examples of language contact leading to some form of bilingualism. (1982:1)

Reporting on the current situation, G. Richard Tucker concludes that there are many more bilingual or multilingual individuals in the world than there are monolingual. In addition, there are many more children throughout the world who have been and continue to be educated through a second or a later-acquired language, at least for some portion of their formal education, than there are children educated exclusively via the first language. (1999:1)

Given the size and widespread distribution of multilingual populations, it is somewhat surprising that an overwhelming proportion of the scientific attention which has been paid to language acquisition relates only to monolingual conditions and to first language acquisition. While there are interesting similarities between L1 and L2 acquisition, the processes cannot be equated, nor can multilingualism be assumed to involve simply the same knowledge and skills as monolingualism except in more than one language. This point is made most cogently by Vivian Cook, who introduced the concept of multilingual competence (his term is “multicompetence”) to refer to “the compound state of a mind with two [or more] grammars” (1991:112). This is distinguished from monolingual competence (or “monocompetence” in Cook’s terminology), which refers to knowledge of only one language.

L2 users differ from monolinguals in L1 knowledge; advanced L2 users differ from monolinguals in L2 knowledge; L2 users have a different metalinguistic awareness from monolinguals; L2 users have different cognitive processes. These subtle differences consistently suggest that people with multicompetence are not simply equivalent to two monolinguals but are a unique combination. (Cook 1992:557)
One message from world demographics is that SLA phenomena are immensely important for social and practical reasons, as well as for academic ones. Approximately 6,000 languages are spoken in the world, with widely varying distribution, and almost all of them have been learned as second languages by some portion of their speakers. The four most commonly used languages are Chinese, English, Spanish, and Hindi, which are acquired by over 2 billion as L1s and almost 1.7 billion as L2s, as shown in 2.1 (based on Zhu 2001 and Crystal 1997b):

<table>
<thead>
<tr>
<th>Language</th>
<th>L1 speakers (in millions)</th>
<th>L2 speakers (in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese</td>
<td>1,200</td>
<td>15</td>
</tr>
<tr>
<td>English</td>
<td>427</td>
<td>950</td>
</tr>
<tr>
<td>Spanish</td>
<td>266</td>
<td>350</td>
</tr>
<tr>
<td>Hindi</td>
<td>182</td>
<td>350</td>
</tr>
</tbody>
</table>

Even just among these four numerically dominant languages, there is great variance. Chinese is an L1 for many more people than any other language, and English is by far the most common L2. In China alone, a recent estimate of numbers of people studying English exceeds 155 million: 10 million in elementary school, 80 million in high school, at least 5 million in universities, and 60 million adults in other instructional contexts. Many more millions will soon be added to these estimates as China implements mandatory English instruction at the primary level. Demographic change is also illustrated by the fact that there are now perhaps 15 million speakers of Chinese L2 (this number is far from certain), but the increasing involvement and influence of China in international economic and political spheres is being accompanied by an increase in the election or need for people elsewhere to learn Mandarin Chinese, the official national language (different varieties, such as Cantonese and Taiwanese, are as different as German and Swedish). An indicator of this trend in the USA is that by 1998, the Modern Language Association reported that Chinese had become the sixth most commonly taught foreign language in US colleges and universities, and numbers are steadily growing.

While multilingualism occurs in every country, for a variety of social reasons the distribution of multiple language use is quite unequal. In some countries, e.g. Iceland, very few people speak other than the national language on a regular basis, while in other countries, such as parts of west Africa, close to 100 percent of the speakers of the national language also speak another language. English L1 speakers often expect to be able to “get along” in English anywhere in the world they may travel for tourism, business, or diplomatic purposes, and may be less likely to become fluent in other languages in part for this reason.
Those who grow up in a multilingual environment acquire multilingual competence in the natural course of using two or more languages from childhood with the people around them, and tend to regard it as perfectly normal to do so. Adding second languages at an older age often takes considerable effort, however, and thus requires motivation. This motivation may arise from a variety of conditions, including the following:

- Invasion or conquest of one’s country by speakers of another language;
- A need or desire to contact speakers of other languages in economic or other specific domains;
- Immigration to a country where use of a language other than one’s L1 is required;
- Adoption of religious beliefs and practices which involve use of another language;
- A need or desire to pursue educational experiences where access requires proficiency in another language;
- A desire for occupational or social advancement which is furthered by knowledge of another language;
- An interest in knowing more about peoples of other cultures and having access to their technologies or literatures. (Crystal 1997b)

The numbers of L1 and L2 speakers of different languages can only be estimated. Reasons for uncertainty in reporting language data include some which have social and political significance, and some which merely reflect imprecise or ambiguous terminology. For example:

1. **Linguistic information is often not officially collected**

   Census forms in many countries do not include questions on language background, presumably because there is no particular interest in this information, because it is impractical to gather, or because it is considered to be of a sensitive nature. In cases where responses concerning language would essentially identify minority group members, sensitivities can be either personal or political: personal sensitivities can arise if identification might lead to undesired consequences; political sensitivities can be at issue if the government does not wish to recognize how many speakers of minority languages there are in order to downplay the political importance of a group, or in order to emphasize cultural/linguistic homogeneity and cohesion by not according recognition to cultural/linguistic diversity.

2. **Answers to questions seeking linguistic information may not be reliable**

   Respondents may not want to be identified as speakers of a minority language. For instance, this was the case for a survey which was conducted several years ago for a rural school district in California. The survey was of parents with preschool children, asking them about the language(s) used at home in order to anticipate future English L2 instructional program needs. Many Hispanic parents insisted that they spoke primarily English at home even when they could only understand and respond to the interviewers.