

Cambridge Introductions to Language and Linguistics

bilingualism

target language

learning strategies

SECOND EDITION

# Introducing **Second Language Acquisition**

Muriel Saville-Troike

context

competence

critical period

CAMBRIDGE

more information - [www.cambridge.org/9781107010895](http://www.cambridge.org/9781107010895)



## Introducing Second Language Acquisition

Written for students encountering the topic for the first time, this is a clear and practical introduction to second language acquisition (SLA). Using non-technical language, it explains how a second language is acquired; what the learner of a second language needs to know; and why some learners are more successful than others. This new edition of Muriel Saville-Troike's bestselling textbook introduces in a step-by-step fashion a range of fundamental concepts, such as SLA in adults and children, in formal and informal learning contexts, and in diverse socio-cultural settings. Taking an interdisciplinary approach, it encourages students to consider SLA from linguistic, psychological, and social perspectives. Providing a solid foundation in SLA, this book has become the leading introduction to the field for students of linguistics, psychology, education, and trainee language teachers.

MURIEL SAVILLE-TROIKE is Professor Emerita from the University of Arizona, named Regents' Professor of English before her retirement. She has made significant contributions to the fields of sociolinguistics and applied linguistics, and has previously held posts at Texas A & M University, the University of Texas, Georgetown University, and the University of Illinois. Her previous publications include *The Ethnography of Communication: An Introduction* (Third Edition, 2003).

## Cambridge Introductions to Language and Linguistics

This new textbook series provides students and their teachers with accessible introductions to the major subjects encountered within the study of language and linguistics. Assuming no prior knowledge of the subject, each book is written and designed for ease of use in the classroom or seminar, and is ideal for adoption in a modular course as the core recommended textbook. Each book offers the ideal introductory material for each subject, presenting students with an overview of the main topics encountered in their course, and features a glossary of useful terms, chapter previews and summaries, suggestions for further reading, and helpful exercises. Each book is accompanied by a supporting website.

Books published in the series

*Introducing Phonology* David Odden

*Introducing Speech and Language Processing* John Coleman

*Introducing Phonetic Science* Michael Ashby and John Maidment

*Introducing Second Language Acquisition* Muriel Saville-Troike

*Introducing English Linguistics* Charles F. Meyer

*Introducing Morphology* Rochelle Lieber

*Introducing Semantics* Nick Riemer

Forthcoming:

*Introducing Language Typology* Edith Moravcsik

*Introducing Psycholinguistics* Paul Warren

# Introducing Second Language Acquisition

SECOND EDITION

MURIEL SAVILLE-TROIKE



**CAMBRIDGE**  
UNIVERSITY PRESS

CAMBRIDGE UNIVERSITY PRESS

Cambridge, New York, Melbourne, Madrid, Cape Town,  
Singapore, São Paulo, Delhi, Mexico City

Cambridge University Press  
The Edinburgh Building, Cambridge CB2 8RU, UK

Published in the United States of America by Cambridge University Press, New York

[www.cambridge.org](http://www.cambridge.org)

Information on this title: [www.cambridge.org/9781107648234](http://www.cambridge.org/9781107648234)

© Muriel Saville-Troike 2012

This publication is in copyright. Subject to statutory exception  
and to the provisions of relevant collective licensing agreements,  
no reproduction of any part may take place without  
the written permission of Cambridge University Press.

First published 2006  
8th printing 2010  
Second edition 2012

Printed in the United Kingdom at the University Press, Cambridge

*A catalogue record for this publication is available from the British Library*

*Library of Congress Cataloguing in Publication data*

Saville-Troike, Muriel, 1936–

Introducing second language acquisition / Muriel Saville-Troike. – 2nd ed.

p. cm. – (Cambridge introductions to language and linguistics)

ISBN 978-1-107-01089-5 (hardback)

1. Second language acquisition. I. Title.

P118.2.S28 2012

418.0071 – dc23 2012002648

ISBN 978-1-107-01089-5 Hardback

ISBN 978-1-107-64823-4 Paperback

Additional resources for this publication at [www.cambridge.org/saville-troike](http://www.cambridge.org/saville-troike)

Cambridge University Press has no responsibility for the persistence or accuracy of URLs for  
external or third-party internet websites referred to in this publication, and does not guar-  
antee that any content on such websites is, or will remain, accurate or appropriate.

# Contents

<i>About the book</i>	vii
<i>Acknowledgments</i>	ix
<b>1</b> Introducing Second Language Acquisition	1
What is SLA?	2
What is a second language?	3
What is a first language?	4
Diversity in learning and learners	5
Summary	5
Activities	6
<b>2</b> Foundations of Second Language Acquisition	7
The world of second languages	8
The nature of language learning	12
L1 versus L2 learning	16
The logical problem of language learning	21
Frameworks for SLA	25
Summary	30
Activities	31
Further reading	32
<b>3</b> The linguistics of Second Language Acquisition	33
The nature of language	34
Early approaches to SLA	36
Universal Grammar	48
Functional approaches	56
Summary	66
Activities	66
Further reading	70
<b>4</b> The psychology of Second Language Acquisition	71
Languages and the brain	72
Learning processes	77
Complexity Theory	86
Differences in learners	87
The effects of multilingualism	99
Summary	100
Activities	101
Further reading	102

<b>5</b>	<b>Social contexts of Second Language Acquisition</b>	<b>105</b>
	Communicative competence	106
	Microsocial factors	108
	Macrosocial factors	126
	Summary	137
	Activities	137
	Further reading	139
<b>6</b>	<b>Acquiring knowledge for L2 use</b>	<b>141</b>
	Competence and use	142
	Academic vs. interpersonal competence	143
	Components of language knowledge	145
	Receptive activities	162
	Productive activities	171
	Summary	179
	Activities	180
	Further reading	181
<b>7</b>	<b>L2 learning and teaching</b>	<b>183</b>
	Integrating perspectives	184
	Approaching near-native competence	188
	Implications for L2 learning and teaching	190
	Summary	190
	<i>Answer guide to questions for self-study</i>	191
	<i>Glossary</i>	195
	<i>References</i>	207
	<i>Index</i>	217



# About the book

This book is a brief but comprehensive introduction to the field of Second Language Acquisition (SLA). The intended audience is primarily undergraduate students, but it is also suitable for graduate students who have little or no prior knowledge of linguistics.

My goals in writing this book are threefold: (1) to provide a basic level of knowledge about second language learning phenomena to students as part of their general education in humanities, the social sciences, and education; (2) to stimulate interest in second language learning and provide guidance for further reading and study; and (3) to offer practical help to second language learners and future teachers.

## Scope and perspective

I have included a broader range of SLA phenomena in this book than is the usual case: those involved in both adult and child second language learning, in both formal (instructed) and informal (natural) contexts of learning, and in diverse sociocultural settings. Since my own professional identity and commitment are interdisciplinary, I emphasize the importance of integrating linguistic, psychological, and social perspectives on SLA even as I recognize the differential nature of their assumptions and contributions. An effort has been made to maintain balance among them in quantity and quality of representation.

The focus of this book is on the acquisition of second language “competence,” but this construct is broadly considered from different points of view: as “linguistic competence” (in the sense of underlying grammatical knowledge); as “communicative competence” (adding notions of requisite cultural knowledge and other knowledge which enables appropriate usage); and as knowledge required for participation in communicative activities involving reading, listening, writing, and speaking.

## Design

Each chapter of this book considers three basic questions: *What* exactly does the L2 learner come to know? *How* does the learner acquire this knowledge? *Why* are some learners more successful than others? Chapter 1 introduces the most basic terms and concepts, beginning with “What is SLA?” Chapter 2 provides a foundational background, ranging from the nature and distribution of multilingualism in the world to generally accepted notions of contrasts between first and second language acquisition. The chapter concludes with a preview of the different theoretical frameworks of SLA which will be surveyed. Chapters 3 to 5 focus in turn on different disciplinary perspectives: linguistic, psychological, and social. Chapter 6 focuses on the competence required for academic and interpersonal functions, and on the interdependence of content, context, and linguistic knowledge. The final chapter briefly summarizes and integrates answers to the basic *what*, *how*, and *why* questions that are posed throughout the book.

Each chapter includes a preview of its content and a summary. Chapters 1 to 6 conclude with suggested activities for self-checking of understanding and for class discussion or individual exploration. Chapters 2 to 6 include annotated suggestions for further reading on each major topic in that chapter, listed in the order in which they occur. Important technical concepts are presented sequentially with key terms listed at the beginning of chapters and highlighted with explanations and examples in the text. A comprehensive glossary is provided for student reference, and the subject index allows for integration and reinforcement of concepts across topics and disciplinary perspectives. All terms which appear in the glossary are highlighted in the text, whether or not they are listed as key terms.

## Second edition changes

The same scope, perspective, and design are retained in the second edition of this book. The major change has involved updating its content and reference beyond 2005, when I submitted my manuscript for the first edition to Cambridge University Press.

While I have considered all recent publications on topics that I had already included in the first edition, I focused on adding information on the one new perspective within each discipline (linguistic, psychological, social) that I believe is most likely to be contributing significantly to SLA scholarship and practice in the early twenty-first century. For linguistics (Chapter 3) I added linguistic interfaces, which is of increasing interest and importance within the Chomsky tradition. For psychology (Chapter 4) I added Complexity Theory, which is changing ways that we pose critical questions and seek answers. And for social approaches, I added Computer Mediated Communication, primarily for the ways it is redefining our concept of “speech community” and influencing instructional practices.

Other changes have been made primarily to revise or clarify content in response to suggestions and comments from readers in different parts of the world. I greatly appreciate the dialogue we

have been having since publication of the first edition, and I sincerely hope that it will continue.

## Website

Additional resources to accompany this text are available for download at the book’s website. These resources include all matter from the ends of chapters (questions for self-study, active learning and introductory suggestions for further reading), and the answer key to the questions for self-study. There are also additional teaching aids and professional resources that are not found in the textbook itself. For teaching, a new section called “More active learning” provides additional thought questions for each chapter to encourage critical thinking. These questions can be used as topics for student essays, class debates, or even, in some cases, mini-research projects. To supplement the textbook for use with advanced students, there is an annotated list, “Primary suggestions for further reading”, made up of articles reporting original research in the field (updated to reflect the additions of the second edition). Finally, for students and instructors interested in the profession, there are current listings of professional organizations, journals, and institutes for research and development.

# Acknowledgments

Any introductory survey of a field is indebted to many sources, and this is no exception (as the relatively long list of references suggests). I am particularly grateful to Karen Barto-Sisamout in the preparation of this work: she developed the suggestions for further reading and chapter activities, and she is responsible for the development and maintenance of the accompanying Website. She has also contributed significantly to other aspects of conceptualization and development. I am also very grateful to colleagues and other readers (especially Rudy Troike) who have made suggestions, corrections, and comments, and to Nadia Moraglio for her careful

and competent proofreading. My students and former students at the University of Arizona have been most helpful in providing relevant examples and in indicating where clarification in my presentation was necessary. I could not begin to make an enumeration, but I thank them all.

Every effort has been made to secure necessary permissions to reproduce copyright material in this work, though in some cases it has proved impossible to trace copyright holders. If any omissions are brought to our notice, we will be happy to include appropriate acknowledgments on reprinting or in any subsequent edition.



# 1 Introducing Second Language Acquisition

## CHAPTER PREVIEW

### KEY TERMS

*Second Language Acquisition (SLA)*

*Second language (L2)*

*Informal L2 learning*

*Formal L2 learning*

*Linguistic competence*

*Linguistic performance*

*First language/  
native language/  
mother tongue  
(L1)*

*Simultaneous  
multilingualism*

*Sequential  
multilingualism*

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.

## What is SLA?

**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 USA 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 clear-cut. 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.

### Chapter summary

Second Language Acquisition (SLA) involves a wide range of language learning settings and learner characteristics and circumstances. This book will consider a broad scope of these, examining them from three different disciplinary perspectives: *linguistic*, *psychological*, and *social*. Different approaches to the study of SLA have developed from each of these perspectives in attempts to answer the three basic questions: *What* exactly does the L2 learner come to know? *How* does the learner acquire this knowledge? *Why* are some learners more (or less) successful than others?

## Activities

### 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 specific 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).
3. Do you know people who don't feel like native speakers of their first language acquired? Or people who feel like native speakers of a language acquired later in life? What do you attribute this feeling to?

# 2 Foundations of Second Language Acquisition

## CHAPTER PREVIEW

### KEY TERMS

*Multilingualism/  
bilingualism*

*Monolingualism*

*Multilingual  
competence*

*Monolingual  
competence*

*Learner  
language*

*Positive transfer*

*Negative transfer*

*Fossilization*

*Poverty-of-the-  
stimulus*

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, and 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.

## The world of second languages

**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 world-wide, 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 more recent 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 “multi-competence”) 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 meta-linguistic 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)

**Table 2.1 Estimated L1/L2 distribution of numerically dominant languages**

	L1 speakers (in millions)	L2 speakers (in millions)
Chinese	1,200	15
English	427	950
Spanish	266	350
Hindi	182	350

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. By the year 2000, the four most commonly used languages were Chinese, English, Spanish, and Hindi, which were acquired by over 2 billion as L1s and almost 1.7 billion as L2s, as shown in Table 2.1 (based on Zhu 2001 and Crystal 1997b).

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. The British Council has estimated that more than 1 billion people are studying English as an L2 (Cook 2002:3), and the number may be closer to 1.75 billion if we include all varieties and functions of the language (McArthur 2001). In China alone this figure includes over 150 million English L2 learners, and millions more are being added as English instruction is further implemented at the primary level. There are now perhaps 15 million speakers of Chinese L2, 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. School districts around the country are also increasingly adding Chinese language courses to elementary and secondary curricula.

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 individual, family, and community 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 when

questions were asked in Spanish. Their linguistic “misrepresentation” was likely motivated by fear that lack of English would trigger further questions about their US citizenship (a reasonable concern on their part, although not the school’s intent). In other cases, respondents may say that they use the dominant language more than they actually do because they reject or are ashamed of their ethnic heritage and wish to assimilate, or because they are afraid of government oppression or social stigmatization. Others may similarly over-report dominant language use because they feel this is the appropriate answer to give official representatives, or in order to qualify for civil privileges, such as being allowed to vote.

On the other hand, respondents may over-report use of minority and ancestral languages because of pride in their heritage. There may also be over-reporting of minority language use in order to obtain more recognition, resources, or services for the groups with which they identify.

How questions are worded also commonly contributes to the unreliability and non-comparability of language data. For example, the following questions might all be intended to elicit the identity of speakers’ L1, but the same speakers might respond differentially depending on which question is asked:

- What is your native language?
- What is your mother tongue?
- What language did you learn first as a child?
- What language was usually spoken in your home when you were a child?
- What language are you most likely to use with family and friends?
- What is your strongest language?

### **3. There is lack of agreement on definition of terms and on criteria for identification**

It may be difficult for someone to answer the common census question, “What is your native language?” for example, if they acquired multilingual competence simultaneously in two languages. In this case, both are L1s, and either or both might be considered a “native language.” Such a question is also problematic for individuals whose **language dominance** (or relative fluency) has shifted from their L1 to a language learned later.

Another issue is the degree of multilingualism. What level of proficiency is needed before one claims to have multilingual competence, or to “know” a second language? Does reading knowledge alone count, or must one also be able to carry on a conversation? What about languages that have been learned only in relation to limited domains or for special purposes? Do claims of multilingualism require near-balance in ability to function in multiple languages, or does multilingual competence include even early stages of L2 learning (the view in much SLA research)?

Perhaps the most basic definitional basis for unreliability in statistics lies in the meaning of “language” itself, for what counts as a separate language involves social and political (as well as linguistic) criteria. For