6 Acquiring knowledge for L2 use

CHAPTER PREVIEW

In this chapter, we continue our consideration of the acquisition of **communicative competence** by examining the knowledge that is needed for second language use. After beginning with an overall characterization of communicative competence, we will see that we must distinguish between (1) knowledge that must be learned in order to fulfill academic functions and (2) knowledge required for interpersonal functions. Areas of knowledge needed are then categorized and prioritized according to traditional levels of language (vocabulary, morphology, phonology, syntax, discourse), and according to activity type (reading, listening, writing, speaking). This chapter thus brings together and integrates the elements of SLA study that we have been exploring within separate linguistic, psychological, and social frameworks in the previous chapters.

KEY TERMS

Pragmatic competence

Academic competence

Interpersonal competence

Cohesion

Genre

Bottom-up processing

Top-down processing

Context

Schemas

Speech acts

Contextualization cues
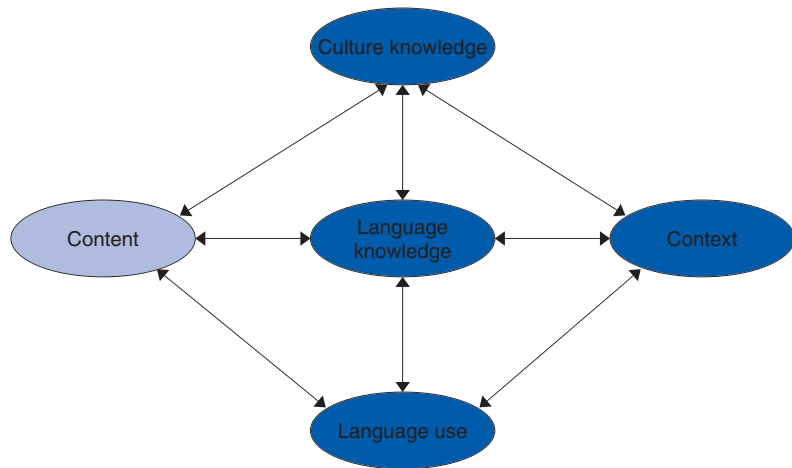
Communication strategies

Figure 6.1
Relationship of domains
of communicative
competence

Competence and use

The definition of **communicative competence** introduced in Chapter 5 is broadly inclusive in scope: "everything that a speaker needs to know in order to communicate appropriately within a particular community." This construct combines the knowledge of language which defines **linguistic competence**, knowledge of the specific components and levels of a language, and knowledge that is required for their appropriate use in communicative activities. Accounting for competence in this broader sense also requires considering "encyclopedic" cultural knowledge concerning the content of what is written or talked about, and recognizing the social significance of the context within which language use takes place. Knowledge of culture includes content, context, and linguistic elements in important respects, as well as an understanding of the wider societal structures and practices that influence norms and conventions of language interpretation and usage. The relationship of these domains is represented in Figure 6.1.

The ability to use language appropriately includes **pragmatic competence**. This can be defined as what people must know in order to interpret and convey meaning within communicative situations: knowledge that accounts for "the choices they make, the constraints they encounter in using language in social interaction, and the effects their use of language has on other participants in the act of communication" (Crystal 1997a:301).

The relationship of knowledge among domains of content, context, culture, language form and structure, and language use is dynamic, interactive, and constitutive. It would be a mistake to think of language use merely as the product of the other domains, since use plays an essential role in their very creation, maintenance, and change.

The knowledge that an L2 learner begins with includes everything that he or she has previously acquired as part of his or her general cognitive development and prior social experience, as well as in his or her acquisition of L1. This prior knowledge partly explains the advantages that older L2 learners such as college students typically have over children in expressing and understanding the information content of L2 writing and speech, in perceiving writer/speaker intent, and in fulfilling interactional and instrumental goals of communication. It also accounts in part for the interference which may occur when prior knowledge of content, context, and culture (as well as L1 linguistic elements) is inappropriately applied to situations of L2 use.

This chapter addresses aspects of commmunicative competence from the perspectives of the three basic questions which have organized this book. We focus here particularly on *what* knowledge of language is required for different types of language use, *how* activities in L2 reading, listening, writing, and speaking are achieved, and *why* learners reach different levels of proficiency in language use.

Academic vs. interpersonal competence

L1 competence ideally involves the broad repertoire of knowledge which people need to communicate appropriately for many purposes within their native language community. L2 competence is typically, perhaps unavoidably, much more restricted, especially when SLA takes place in a foreign language setting. For most people, their second language often serves a much more limited range of needs than their first language, depending on the situation they are in. For example, native speakers of English in the USA might learn Spanish L2 because their jobs require engaging in cross-national sales and services, or because they are in social service roles which involve daily communication with native Spanish speakers, or because they have academic interests in New World history and need access to archival records and scholarly publications that are available in Spanish. Native speakers of Chinese in China, on the other hand, might need to learn English L2 to prepare for an influx of English-speaking visitors, to serve on international committees that use English as a common language for proceedings, or to pursue graduate degrees in an English-dominant country. Native speakers of Turkish might learn German L2 to engage in information exchange on technological topics, to provide guide services for German tourists in Turkey, or to work for a company in Germany. Each of these motivations for learning an L2 entails very different combinations of linguistic and cultural knowledge and different levels and types of proficiency.

Priorities for L2 use

In considering the purposes for which people learn second languages, we must make a distinction between at least two fundamental types of communicative competence: **academic competence** and **interpersonal competence**. **Academic competence** would include the knowledge

needed by learners who want to use the L2 primarily to learn about other subjects, or as a tool in scholarly research, or as a medium in a specific professional or occupational field. Learners with such a goal should concentrate above all on acquiring the specific vocabulary of their field or subject area, and on developing knowledge that enables them to read relevant texts fluently in that subject area. If language learners plan to study the subject at an L2-medium university, beyond specific vocabulary knowledge and reading ability, they must also put a high priority on processing oral L2 input during lectures and class discussions: i.e. on developing the ability to engage successfully in academic listening. Further, they are likely to need proficiency in L2 academic writing in order to display their knowledge in examinations that may be required for university admission and to earn academic degrees. Many students need to develop L2 writing proficiency for the academic purposes of producing term papers or theses, and researchers may need to do so for publishing articles for international information exchange. Developing L2 academic reading, listening, and writing proficiency, however, does not necessarily require fluent speaking ability, particularly for learners studying the L2 in a foreign language context.

Interpersonal competence encompasses knowledge required of learners who plan to use the L2 primarily in face-to-face contact with other speakers. As with academic competence, vocabulary is the most important level of language knowledge for these learners to acquire, although the domains of vocabulary involved are likely to be very different. Knowledge which enables them to participate in listening and speaking activities merits the highest priority for interpersonal contexts; they must be able to process language rapidly "online" (without the opportunity to review or revise text that is possible in reading and writing), as well as possess strategies for achieving clarification and negotiation of meaning during the course of face-to-face interaction. Depending on the situation, the level of language to be used may be formal or informal. Writing and reading activities are required in some interpersonal situations, but speaking and listening are much more likely to play dominant roles in interpersonal production and interpretation.

The contrast in priorities for L2 communicative activities depending on academic versus interpersonal needs is shown in Table 6.1. The key differences are that reading is typically much more important for academic than for interpersonal needs, and that speaking is usually much more important for interpersonal than for academic purposes.

Table 6.1 Priorities for L2 activities	
Academic competence	Interpersonal competence
1. Reading	1. Listening
2. Listening	2. Speaking
3. Writing	3. Reading
4. Speaking	4. Writing

Table 6.2 Classification of activities involving language use		
	Written mode	Oral mode
Receptive	Reading	Listening
Productive	Writing	Speaking

As shown in Table 6.2, the four areas of activity involving language use that are listed in Table 6.1 may be classified along two dimensions: as **receptive** versus **productive**, and as conveyed by **written** versus **oral** modes of communication. The activities that have highest priority in academic competence are **receptive** (reading and listening), which function primarily in processing input; the activities with highest priority for interpersonal competence are **oral** (listening and speaking), which function in processing both input and expression. While all four areas of communicative activity draw on an overlapping pool of L2 knowledge at different language levels, they are independent to some extent. Development of receptive ability must normally precede productive ability in any language, but beyond that basic sequence, order of L2 development along these dimensions depends on social circumstances. It is possible for learners to develop a relatively high degree of proficiency for engaging in receptive activities along with only very limited ability for production, or a high degree of proficiency for engaging in either written or oral activities without well-developed ability to engage in activities in the other mode. Many fluent bilinguals around the world are illiterate in one or both of their languages. Learners' academic and interpersonal competence which underlie their ability to engage in these activities usually develop to different degrees, and there is no necessary reason for one type to precede or outpace the other. It is known, however, that literacy (and schooling) in the L1 facilitates acquisition of competence in an L2 under conditions of formal instruction.

Components of language knowledge

Linguists have traditionally divided language into the following six components for purposes of description and analysis (as listed in Chapter 3):

- Vocabulary (lexicon)
- Morphology (word structure)
- Phonology (sound system)
- Syntax (grammar)
- Nonverbal structures
- Discourse (ways to connect sentences and organize information)

Even the most highly educated adult native speakers can never expect to have mastery of *all* the potential resources of a community's language, and such an expectation for the vast majority of any L2 learners would be completely unrealistic. Especially in contexts where a second language is

going to be needed for only a limited range of functions, deciding on priorities for *what* needs to be learned is an important step for teachers and learners to take.

Determining the specific L2 needs of any group of learners involves identifying what subset of linguistic elements is associated with the varieties (or **registers**) of a language that are used in particular situations. In recent years, much of this task has been carried out using computerized analyses of "corpora," or large collections of written and spoken texts (e.g. Biber, Conrad, and Reppen 1998). Such **corpus linguistic analysis** can be especially useful in determining the relative frequency of different vocabulary items and grammatical patterns as a basis for deciding what needs to be taught for specific purposes.

Vocabulary

As we have already noted, **vocabulary** (or **lexicon**) is the most important level of L2 knowledge for all learners to develop – whether they are aiming primarily for academic or interpersonal competence, or for a broader scope of communicative competence that spans the two. There is a core of high-frequency words in a language that everyone needs to learn, but beyond that, which specific vocabulary elements learners are most likely to need depends on whether the L2 is going to be used primarily for academic or interpersonal functions.

The core vocabulary in every language includes **function words**, a limited set of terms that carry primarily grammatical information. For example, in English the most frequently used words include: determiners *the*, *that*, *this*; prepositions *to*, *of*, *for*; conjunctions *and*, *but*; pronouns *I*, *it*, *he*, *she*, *you*; and auxiliary verbs *is/was/be*, *have/has/had*. The most frequently used words in spoken (but not written) English also include interjections *yeah*, *oh*; contractions *it's*, *that's*, *don't*; and verbs expressing personal opinion or feeling *know*, *like*, *think*. Compilations of the fifty most common words in written versus spoken English are listed in Table 6.3.

English words that occur with high frequency in a wide range of academic (but not interpersonal) contexts include modifiers such as *analytical*, *explanatory*, and *implicit*, as well as names for scientific concepts such as *data*, *hypotheses*, and *correlation*. Other general academic vocabulary items from written texts have been compiled in the *University Word List* (Xue and Nation 1984). A subset of these words is reproduced in Table 6.4. Many technical terms must be learned for any specialized field, such as *lexicon*, *morphology*, *phonology*, and *discourse* for linguistics. Beginning students in a field (whether L1 or L2 speakers) typically encounter such subject-specific terms during introductory coursework along with the concepts they represent. Part of the vocabulary challenge for advanced L2 students and scholars in a field is learning L2 labels for concepts they may have already acquired in their L1. Some of these will be recognized even without learning, since common scientific and technological terms increasingly tend to be borrowed from one language to another. However, this is not always the case, and differences can create additional difficulties for learners from different L1s. For example, English *linguistics* is *la*

Table 6.3 Fifty most frequent words in written and spoken English					
Rank	Written	Spoken	Rank	Written	Spoken
1	the	the	26	by	we
2	to	I	27	me	he
3	of	you	28	her	do
4	a	and	29	they	got
5	and	to	30	not	that's
6	in	it	31	are	for
7	I	a	32	an	this
8	was	yeah	33	this	just
9	for	that	34	has	all
10	that	of	35	been	there
11	it	in	36	up	like
12	on	was	37	were	one
13	he	is	38	out	be
14	is	it's	39	when	right
15	with	know	40	one	not
16	you	no	41	their	don't
17	but	oh	42	she	she
18	at	so	43	who	think
19	his	but	44	if	if
20	as	on	45	him	with
21	be	they	46	we	then
22	my	well	47	about	at
23	have	what	48	will	about
24	from	yes	49	all	are
25	had	have	50	would	as

Written data from Cambridge International Corpus (CIC); spoken data from CANCODE (from McCarthy & Carter 1997:23–24).

linguistique in French, and *la linguística* in Spanish, but *Sprachwissenschaft* in German and *yuyanxue* in Chinese. Obviously going between English and French or Spanish is easier in the field of linguistics than between any of these languages and German or Chinese.

Table 6.4 General Academic Word List (Nation & Waring 1997:16)				
accompany	formulate	index	major	objective
biology	genuine	indicate	maintain	offer
comply	hemisphere	individual	maximum	passive
deficient	homogeneous	job	modify	persist
edit	identify	labour	negative	quote
feasible	ignore	locate	notion	random

On the other hand, "everyday" vocabulary and expressions are most likely to be very different in unrelated languages, since they are rarely borrowed. Thus, while English *good* is *gut* in German, it is *bon* in French, *bueno* in Spanish, and *hao* in Chinese. However, similarities in borrowed or commonly inherited words can sometimes contain unexpected traps for the learner, as German *gross* means simply 'large,' and Spanish *largo* means 'long,' while *embarazada* in Spanish means 'pregnant.' Thus, ironically, learning the L2 vocabulary for ordinary informal interpersonal interaction sometimes poses more difficulties than learning the technical vocabulary for an academic or scientific field.

Interpersonal situations can be subdivided into those which have primarily affective (**interactional**) purposes, and those which are task-oriented (**transactional**). Each specific context determines priorities for vocabulary learning beyond the most frequent core. Beyond common greetings, leave-takings, invitations, refusals, and warnings, the necessary vocabulary and phraseology is likely to differ drastically between, say, going on a swimming party at the beach and following instructions on how to repair an automobile engine. And social context may dictate **register** differences as great as *How are you today?* vs. *How're ya doin'?* or *I'm fine, thank you* vs. *Just great* or some current slang-determined response. Regional differences are likely to be greatest at the informal interactional level, and least at more formal and more academic levels. Differences between national varieties of a widespread language may affect even relatively technical transactions, as the names for car parts famously differ between British and American English, and the meanings of food terms may differ between Spain and Latin American countries.

Besides individual vocabulary items (single words and compounds), other lexical elements which vary in frequency by domain include **idioms**, **metaphors**, and other multiple-word combinations that commonly occur together (**collocations**). These "chunks" of language are typically memorized as holistic units, and often without recognition of individual words or analysis of how they are combined. Some of those reported in English academic speech (e.g. occurring in class lectures and discussion) are *bottom line*, *the big picture*, *take at face value*, and *a ballpark guess*. Others serve organizational functions, signaling logical connections

between segments of classroom discourse or a change of focus: e.g. *go off on a tangent*, *on that note*, and *train of thought* (Simpson and Mendis 2003). Though such expressions are seldom taught in language lessons, their appropriate interpretation may be significant for establishing coherence in L2-medium subject area instruction. The most frequent multiple-word combinations in English interpersonal speech include greetings and other formulaic routines, and such discourse fillers, hedges, or smoothers as *you know*, *kind of*, and *never mind*.

Vocabulary knowledge is acquired to different degrees, with learners first recognizing words they see or hear, then producing them in limited contexts, and ultimately (perhaps) fully controlling their accurate and appropriate use. L2 speakers may never acquire complete knowledge of some words that nevertheless become part of their productive repertoire. Among the last types of word knowledge to be mastered are collocational behavior (what words go together), metaphorical uses, connotations associated with synonyms, and stylistic register constraints (see Nation 1990).

The number of words that L2 speakers learn, as well as the degree of their vocabulary knowledge, depends on their ability to "pick up" this information from contexts (both oral and written) in which the words are used as well as from explicit instruction. The following types of knowledge contribute to effective use of context for vocabulary learning (Nagy 1997):

- *Linguistic knowledge*: syntactic information; constraints on possible word meanings; patterns in word structure; meanings of surrounding words.
- *World knowledge*: understanding of the concepts which the words represent; familiarity with related conceptual frameworks; awareness of social associations.
- *Strategic knowledge*: control over cognitive resources.

Beyond knowledge of words, fluent use of language requires a level of automaticity that allows processing their structures and meanings in real time. This is an incremental achievement upon which effective engagement in all language activities ultimately depends.

Morphology

L2 learning at the level of **morphology** (or word structure) can be very important for vocabulary development as well as for achieving grammatical accuracy. This level is highly significant for learning English, for instance, where thousands of words are formed by compounding smaller words (e.g. *wind + shield = windshield* [British *windscreen*]) or by adding prefixes and suffixes (called **derivational morphology**) that can create new meanings (e.g. *un- + kind = unkind*) or change part of speech (e.g. *friend* [noun] + *-ly = friendly* [adjective]). Again using English as an example, words used for academic communication (especially in writing) are characteristically longer than words used for interpersonal communication (especially in speech), and using them requires knowledge of such word-forming

elements and processes. Commonly encountered affixes in scientific terms are the suffix *-ology* 'study of' (*sociology*, *psychology*, *biology*), and the prefix *bio-* 'life' (*biology*, *biodiversity*, *biochemical)* or *geo-* 'earth' (*geography*, *geology*, *geomorphism*). Suffixes may convert adjectives to verbs or nouns, verbs to nouns, nouns to adjectives or verbs, and adjectives to adverbs, as in *divers-ifi-cation-al-ly* or *operat-ion-al-ize-abil-ity*. (In fact, learning to compute the meaning of such complex forms automatically is part of the L2-like experience of getting a college education even for native speakers.)

Grammatical accuracy in many languages requires knowledge of the word parts that carry meanings such as tense, aspect, and number (called **inflectional morphology**, or **inflections**), as in English *kicked*, *coming*, and *books*. Researchers from both linguistic and cognitive perspectives have focused considerable attention on how these are acquired (discussed in Chapters 3 and 4). The process is an especially interesting target of study in SLA because errors at the level of morphology often persist even many years after individuals have learned substantial vocabulary and mastered most elements of L2 syntax.

Inflectional morphology, and related phenomena like gender and number agreement (in Romance languages, German, or Russian) may long remain problematic for L2 learners in part because the information these carry is often redundant in actual contexts of language use, and thus not essential for the interpretation of meaning (especially in face-to-face interaction). The logical unnecessariness of most inflectional morphology is shown by the fact that languages like Chinese and Thai dispense with it almost entirely. However, in those languages which have it – and this includes all European languages – accuracy in production of morphology is usually expected as part of advanced academic language competence, and in the interpersonal competence of L2 speakers who want or need to project an image of being well educated, or who want to be fully accepted as an in-group member.

Phonology

Mastery of the L2 sound system was considered the first priority for teaching and learning during the middle of the twentieth century (as expressed in the writing of Fries 1945; quoted in Chapter 3). This level of language received much less attention during the second half of the century as major interests in linguistic theory shifted from phonology to syntax, and with general acceptance of the **Critical Period Hypothesis**, which claims that learners past the age of puberty are in all probability unable to achieve native-like pronunciation in any case – no matter how much effort is spent on the learning task. In recent years, however, there has been renewed interest in phonological perception and production from linguistic, cognitive, and social perspectives, and (for at least some contexts of use) renewed emphasis is now being placed on pronunciation in teaching second languages.

As a component of academic competence, proficiency in phonological perception is required for listening if learners are studying other subjects through the medium of L2, and at least intelligible pronunciation is

needed for speaking in most educational settings. A much higher level of proficiency in production is required if researchers or students are using the second language to teach others or for participating orally in professional conferences, but the relative priority of pronunciation otherwise remains low compared to vocabulary and syntax.

As a component of interpersonal competence, proficiency in phonological perception and intelligible production are essential for successful spoken communication, but a significant degree of "foreign accent" is acceptable in most situations as long as it is within the bounds of intelligibility. Native or near-native pronunciation is usually needed only when learners want to identify socially with the L2 language community for affective purposes, or when their communicative goals require such identification by hearers. With many US and British business firms establishing telephone-based service centers in other parts of the world, for instance, employees in those countries may need to master even specific regional features of American or British English as part of their job training in order to create the illusion for customers that calls are being answered domestically.

The following aspects of the sound systems are likely to differ for L1 and L2 (see Chapter 3):

- Which speech sounds are meaningful components of the phonological system (**phonemes**)
- Possible sequences of consonants and vowels (**phonotactics**)
- Which speech sounds can and cannot occur in combination with one another, in which syllable and word positions
- Intonation patterns (stress, pitch, and duration)
- Rhythmic patterns (pauses and stops)

Transfer from L1 to L2 phonology occurs in both perception and production and is thus a factor in both listening and speaking. Trubetzkoy ([1939]1958) characterized perception of L2 speech sounds as being "filtered" through the phonological system of L1, which acts like a "sieve." Particularly at early stages of acquisition, L2 learners are likely to perceive L2 pronunciation in terms of the L1 phonemic categories which have already been established.

The types of potential mismatch between L1 and L2 systems have been characterized as contrasts in phonemic correspondences (Haugen 1956), as shown in Table 6.5 on p. 152.

This contrastive model predicts that English L1 speakers will have difficulty perceiving and producing Spanish L2 distinctions between *pero* 'but' (with a flapped /ř/) and *perro* 'dog' (with a trilled /r̃/) because English does not distinguish between flapped and trilled variants of /r/; learning Spanish requires acquiring a *divergent* distinction for English speakers. Italian L1 speakers will have difficulty with the English L2 distinction between *meet* /mit/ and *mitt* /mIt/, because Italian does not have a meaningful distinction between those two vowels. In the other direction, Spanish L1 speakers who are learning English L2 and English L1 speakers who are learning Italian L2 might initially overdifferentiate target phonemes /r/ and /i/, respectively, but *convergence* – essentially ignoring the

Table 6.5 Types of phonemic correspondences		
	Examples	
Type	**L1**	**L2**
divergent	English /r/	Spanish /ř/ and /r̄/
convergent	English /i/ and /I/	Italian /i/
new	English –	German /x/; Navajo /ɫ/
similar	English /t/	Spanish /t/

differences – is called for as part of the SLA process. As is evident, convergence is always far easier than divergence in L2 learning.

New phonemes are likely to be perceived as having features of the L1 speech sound which is the closest correspondent: German *ich* /ix/ 'I' is heard as /ik/ by the English learner, and Navajo *hogan* /hoɫan/ 'house' is heard as /hogan/, because the English phonemic system does not include sounds that are represented by the symbols /x/ and /ɫ/, and /k/ and /g/ are their nearest equivalent. The *similar* type of correspondence, as English /t/ and Spanish /t/, is not likely to be problematic for listening but contributes to a "foreign accent" in speaking; English /t/ is pronounced with the tongue making contact further back on the gum ridge than Spanish /t/, which is produced with the tongue against the back of the teeth.

Transfer can also be found for other aspects of phonological systems, including syllable structure. An initial consonant cluster such as the /sk/ in English *school* is not permitted in Spanish syllable structure, as mentioned earlier, so a Spanish L1 speaker may pronounce the word as two syllables, /es-kul/, to fit the Spanish pattern. Conversely, English speakers may find it difficult to pronounce /ts/, which is a common sequence at the end of words in English, as in *cats*, when it occurs at the beginning of words as in German *zehn* '10.' Intonation often conveys important elements of meaning such as speaker intent which can be lost or misidentified across languages, and patterns of stress in words and phrases, which provide information for segmenting speech into grammatical units, may not be perceived or produced accurately. English speakers, who are accustomed to reducing vowels in unstressed syllables to an indistinct schwa, may create confusion in Spanish by failing to distinguish between the final unstressed vowels of *hermano* 'brother' and *hermana* 'sister.' L1 speakers of European languages, who use differences in voice pitch primarily for sentence or phrase intonation, find it challenging to perceive and produce distinctive tones necessary for distinguishing individual words in Chinese.

As we saw in Chapter 3, **Contrastive Analysis** of L1 and L2 does not account for all learner errors, and many problems which are predicted do not emerge. The approach has been most reliable for predicting L1 influence on L2 acquisition of phonology, however, and remains useful for explaining nonnative perceptual patterns (e.g. there are contrastive outlines of over twenty languages published as a guide for English teachers in Swan and Smith 2001).

The concept of phonemes as "bundles" of distinctive features (e.g. Chomsky and Halle 1968) is also still relevant in accounts of why L2 speech sounds are perceived in terms of L1 categories. On this account, each phoneme in a language consists of a unique "bundle" of distinctive features which make it perceptibly different from other phonemes to speakers of that language. The possible set of features is a universal; those features which distinguish phonemes in any L1 or L2 are a subset. Some analysts argue that it is these features, rather than the phonemes per se, which influence perception (see Brown 2000).

Another aspect of perception and production of speech segments which has received considerable attention is voice onset time (VOT), which is related to the location of a phoneme boundary and to identification of initial stop consonants. The location of boundaries for multilinguals often involves compromise, with a VOT value between L1 and L2. This process is often found to be not so much simple transfer from L1 to L2 as restructuring of acoustic-phonetic space to encompass both systems (Leather and James 1996).

In contrast, yet another effect that is found is one of exaggeration, where learners sometimes maximize a difference between L1 and L2. For example, Flege (1980) found that an Arabic L1 speaker produced a greater duration contrast between /p/ and /b/ in English L2 than do English L1 speakers (although Arabic does not have a similar /p/–/b/ distinction), and Gass (1984) reported an Italian L1 speaker maximizing the phonetic contrast between Italian /b/ and English /p/ when producing English L2: "learners first identify *that* there is something to learn and then work out the details, which in many cases involves the maximization of the features of the new element and contrast" (Gass 1996:328). Individual, sociolinguistic, and sociocultural factors can also have a major impact on L2 phonology; these were discussed in Chapters 4 and 5.

Syntax

Depending on the theoretical linguistic perspective one takes (Chapter 3), acquiring the syntax of another language may be seen as an issue of internalizing new construction patterns, generative rules, different parameters for innate principles, or collocational probabilities and constraints. Whatever the analysis, the process begins with recognizing that sentences are more than just combinations of words, and that every language has specific limits and requirements on the possible orders and arrangements of elements. Contrastive analysis helps us anticipate some of the problems and difficulties – or lack thereof – that we may face in trying to acquire another language.

A first step is realizing that certain aspects of language are universal, but how they are expressed may vary greatly. All languages have structures for making statements, asking questions, and denying assertions. Sentences in all languages consist of a subject and a predicate, and predicates consist of a verb, or a verb and one or two objects, plus other possible phrases expressing such things as time, place, frequency, manner, goal, source, or purpose. But the order of elements, and degree of flexibility in

their order, may differ radically. Using *S* for subject, *V* for verb, and *0* for object, linguists classify languages according to the typical order in which these components occur, e.g.

S V O	*English, Chinese, French, Russian*
S O V	*Japanese, Turkish, Persian, Finnish*
V S O	*Irish, Welsh, Samoan, Zapotec*

(German is unusual in having a mixed system, since the word order is SVO in main clauses and SOV in subordinate clauses.)

While these orders are statistically most common, most languages have ways to vary the basic order to some extent for various reasons, including focus, information structure, and style. Some languages, like English or Japanese, are fairly rigid insofar as allowing variation in order; others such as Russian or Latin are extremely flexible. In English, for example, the SVO order is often essential in distinguishing subjects and objects: in *William hit Peter*, we know from the order that William initiated the action and that Peter was the one injured; if the order is reversed to *Peter hit William*, we make the opposite inference. In a language like Russian or German, however, case markers on the noun or article indicate subject or object function, so any order is possible since the information will still be evident (in this way morphology and syntax interact).

English as it was spoken a thousand years ago (Old English) was more like Russian or Latin, as this sentence shows:

Se cyning seah ðone bisceop.
('The king saw the bishop.')

Since the form of the definite article (*se* vs *ðone*) identified whether the noun was subject (nominative case) or object (accusative case), the order could be switched without changing the basic meaning:

ðone bisceop seah se cyning.
Se cyning ðone bisceop seah.
ðone bisceop se cyning seah.

Modern English has lost this flexibility, since the invariant form of *the* no longer reflects the function of the noun in the sentence.

Note, however, that word order in Old English was not completely free, since the position of the article could not be switched with the noun. Just as we cannot say

*King the saw bishop the.

the order of these words could not be switched either. Just so, even in very flexible languages, the order of elements *within* constituent phrases may be quite rigid:

English	Japanese
in Tokyo	Tokyo *de*
*Tokyo in	**de* Tokyo

English speakers are familiar with the concepts of grammatical gender and number, which determine the choice of pronouns, and whether the noun is marked for singular or plural:

Singular		Plural	
the boy	he/him	the boys	
the girl	she/her	the girls	they/them
the tree	it/it	the trees	

In German, as was formerly the case in English, the form of the article must agree both in gender and number with the noun, and additionally may indicate whether the noun phrase is used as subject, object, or modifier (genitive):

Singular	Plural
der Arm 'the arm'	die Arme 'the arms'
die Reise 'the trip'	die Reisen 'the trips'
das Kind 'the child'	die Kinder 'the children'

English speakers will predictably have difficulty with this (something our linguistic ancestors took for granted!), whereas German speakers learning English face a much easier task, since they can simply ignore the need for article agreement. Speakers of Russian, Chinese, and Japanese, on the other hand, will find even this simplified *the* very difficult to master, since these languages lack an exact equivalent.

English speakers acquiring a Romance language such as Spanish must learn to categorize all nouns into two genders, rather misleadingly labeled "masculine" and "feminine," and to select articles to agree in gender and number with the noun, as well as to show this agreement in adjectives (and to place most adjectives *after* rather than before the noun):

Masculine	Feminine
el edificio blanc*o*	*la* casa blanc*a*
los edificios blanc*os*	*las* casas blanc*as*

While speakers of these languages face a simpler task in acquiring this aspect of English:

the white building	the white house
the white buildings	the white houses

they conversely must learn when *not* to use the definite article:

*I always enjoy the rap music.

For Chinese speakers, and speakers of most Asian languages, having to mark plurals on nouns in English will be a challenge, since this is not done in these languages, which also do not distinguish gender (except artificially in writing) or subject/object function in pronouns:

English	Chinese
he/him	ta
she/her	ta
it/it	ta

English speakers, on the other hand, while finding Chinese pronouns simple to acquire (though they must, conversely, learn *not* to use them much of the time), will have to internalize a completely different system of gender, one based primarily on the *shape* of things, e.g.:

English	Chinese	
a book	yiben shu	(collection of objects)
a table	yizhang zhuozi	(flat object)
a pen	yizhi bi	(long, thin object)

Other differences between English and some other languages include whether any movement of words in the sentence is required to form yes/no and Wh-questions, how passives are formed, where and how negation is marked (and whether "double negatives" are required, as in Romance languages), and how time and perspective are marked in the verb system.

These are only a few examples of the kinds of grammatical issues that face speakers of different L1s acquiring an L2, just within simple sentences. However, academic competence requires processing much longer and more complicated sentences than does interpersonal competence. Academic sentences are often grammatically complex, involving various types of subordination. In addition, passive constructions are much more likely to be used in order to foreground objects and results and to background agents of actions (or omit them entirely, as in the present passive sentence). The general need to provide specific content information in academic discourse results in different forms of linguistic expansion and elaboration, including (in many European languages, for example) the use of more prepositional phrases and relative clauses to modify nouns. The impersonal nature of much academic writing and speaking, especially in European languages, leads to the use of more abstract expressions, emphasizing states rather than expressing actions.

One way this is achieved in English is through the use of **nominalizations**, by which whole sentences are transformed into fillers for noun phrase positions. For example:

Edison invented the phonograph.	==> Edison's invention of the phonograph
Caesar conquered Gaul.	==> Caesar's conquest of Gaul
I analyzed the report.	==> My analysis of the report
Someone constructed the Sphinx.	==> The construction of the Sphinx
Bacteria exist in the mouth.	==> The existence of bacteria in the mouth
The war was widely opposed.	==> Wide opposition to the war

This process allows several simple sentences to be combined into one, and increases the density of information transmitted. For example:

Scientists were working in a laboratory.
The laboratory was in Chicago.
Scientists discovered something.
Bacteria exist in the mouth.
This is what they discovered.
Someone reported this event last month.
==> The discovery of the existence of bacteria in the mouth by scientists in a laboratory in Chicago was reported last month.

Here six sentences are condensed into one, reducing the number of words from thirty to twenty one, but at the expense of increasing the syntactic complexity of the resulting sentence, and introducing the abstract nouns, *discovery* and *existence*, which may be less familiar to some readers, who may not know how to process the relations of other words to these, and who may not realize that the complex construction can be deconstructed back to simpler sentences.

In contrast, grammatical structures used for interpersonal functions are much more likely to be short, simple sentences. Often they are not complete sentences at all, but fragments like *OK*, *Right*, and *Me too*. Contracted forms such as *I'm*, *it's*, and *don't* are common, and questions and directives are more frequent sentence types. Language used for affective purposes often serves to express a speaker's point of view rather than to transmit referential information; this functional difference accounts for a high frequency of such verb constructions as *is going to*, *is supposed to*, *needs to*, and *wants to* (Scheibman 2002), and verbs like *know*, *think*, and *say* (see Table 6.3 on p. 147).

Because many of the grammatical structures common to interpersonal communication are different from those found in written academic texts, even the development of considerable fluency for everyday interactive purposes does not guarantee that a learner will acquire the syntactic knowledge that is necessary for the advanced literacy that full academic competence requires. Nor does proficiency in processing the formal, complex structures of academic writing guarantee a learner's ability to participate appropriately in informal conversations which are characterized by sentence fragments and contractions, rapid give-and-take, and "everyday" vocabulary. Beyond very basic common structures, the syntactic knowledge required for either domain requires extensive input that is specific to the intended context of use.

Nonverbal structures

Nonverbal structures as well as linguistic ones contribute to the meaning of language when speakers and/or listeners are visible, whether in face-to-face reciprocal interaction or as electronic images. These include facial expressions, eye gaze, gestures, body position, and spatial orientation or proxemics (e.g. physical distance from others). Some have universal interpretations and thus are essentially the same in L1 and L2, but many are conventional symbols with different meanings in different languages and cultures. While their functions in communication have been studied for many decades by philosophers, psychologists, and anthropologists, they have just recently begun to receive serious attention within SLA. Most of the research so far is about the occurrence and role of gestures (e.g. Gullberg 2006; McCafferty 2008; McCafferty and Stam 2008).

Gestures occur more frequently in L2 contexts than in L1 communication among adults. I have already illustrated their role in conveying meaning even when speakers have no language at all in common, and a similar compensatory function continues for learners when they don't know how to express a concept verbally. They are used for the same purpose by teachers and other fluent L2 speakers to provide more clues to meaning when addressing less fluent learners. In addition, teachers often use gestures to help organize and focus student attention on important aspects of a message or lesson. Recent research also suggests that use of gestures by learners may have a positive effect on memory for new vocabulary (Macedonia, Müller, and Friederici 2011).

Much of our use of nonverbal behaviors in communication is unconscious, and thus outside of our control, but bringing them to awareness is one potential outcome of research and instruction. Doing so is especially important when they have language and culture-specific meanings that are likely to contribute to misunderstanding of verbal content and intent. (A classic, and very readable, discussion of cultural misunderstandings due to different types of nonverbal behaviors can be found in Hall 1959.)

So far, attention to these structures by researchers in SLA has focused primarily on *what* must be learned about a second language in this

direction. *How* nonverbal structures are learned probably depends on interaction with and feedback from L2 native speakers in second language settings, and may be inaccessible – and perhaps unneeded – in foreign language contexts. *Why* some learners are more successful than others in producing L2 nonverbal structures appears to depend on personality and attitudinal factors as much as on learning contexts and aptitude, but evidence for this claim is still largely anecdotal.

Discourse

Linguistic elements at the level of discourse function beyond the scope of a single sentence. At a microstructural discourse level, these include sequential indicators, logical connectors, and other devices to create **cohesion**. At a macrostructural discourse level, we go beyond linguistic elements to knowledge of organizational features that are characteristic of particular **genres**, and of interactional strategies. Both microstructural and macrostructural levels are sensitive to the relationship between language forms and the communicative situations within which they are used, requiring an essential interface of linguistic knowledge with content, culture, and context.

Sequential indicators are linguistic elements that connect phrases, clauses, or longer units of written or spoken text to signal the order in which events take place. In English they may be set off with a comma or pause, as in the following example (which is a paraphrase of the preview to this chapter):

First, we will consider an overall characterization of communicative competence. *Then*, we will distinguish between knowledge that is required for academic versus interpersonal functions. *Next*, we will categorize and prioritize areas of knowledge according to traditional levels of language. *Finally*, we will explore aspects of communicative competence in relation to activity type.

Other common indicators of temporal sequence in English include *before–after*, and *yesterday–today–tomorrow*. An overlapping set of elements indicates spatial sequence and may also be used to delineate items in a list (often in order of priority or relative importance).

Logical connectors occur between clauses or other grammatical constituents to indicate such relations between them as cause–effect (e.g. *because*; *as a result*; *consequently*), contrast (e.g. *however*; *on the other hand*), and addition of information (e.g. *furthermore*; *moveover*). Academic written English typically prefers overt verbal expression of the connections, but many other languages (e.g. Chinese and Korean) often prefer to express such relationships by juxtaposition of clauses rather than with added linguistic elements. Use of overt logical connectors is an aspect of English L2 which is problematic for many learners.

Cohesion devices link one element of discourse to another, integrating them into a unified text. They include many of the sequential indicators and logical connectors that are listed above, but also such ties as pronominal and lexical reference, substitution, and ellipsis. The most

Table 6.6 Types of cohesion in English	
Reference	
• Pronominals	*he, they*
• Demonstratives; articles	*this, the*
• Comparatives	*same, other*
Substitution	
• Nominal substitutes	*one, all*
• Verbal substitutes	*do, likewise*
• Clausal substitutes	*so*
Ellipsis	
• Nominal ellipsis	*(omissions at subsequent mention)*
• Verbal ellipsis	
• Clausal ellipsis	
Conjunction	
• Additive	*and, as well as*
• Adversative	*yet, but, however*
• Causal	*so, it follows*
• Temporal	*then, in the end*
• Continuative	*of course, anyway*
• Intonation	
Lexical	
• Same item	*mushroom–mushroom*
• Synonym or near synonym	*the ascent–the climb*
• Superordinate	*a new Jaguar–the car*
• "General" item	*the rafters–those things*
• Collocation	*boy–girl, north–south*

frequently cited typology of English devices is by Halliday and Hasan (1976). These are listed in Table 6.6.

Some of these devices are illustrated in the following paragraph:

Students who acquire second languages *do so*[1] in many social contexts. For example, *they*[2] may *learn L2s*[3] in formal classrooms, or [   ][4] in informal interaction with native speakers. *Language learners*[5] may profit from

either setting[6], *but*[7] *of course*[8] not *all*[9] will have equal success. *In the end*[10], motivation *as well as*[11] aptitude *and*[12] opportunity is *a critical variable*[13].

[1]Substitution for *acquire second languages*

[2]Pronominal reference for *students who acquire second languages*

[3]Synonym for *acquire second languages*

[4]Ellipsis for *they may learn L2s*

[5]Synonym for *students who acquire second languages*

[6]Substitution for *formal classrooms* and *informal interaction*

[7]Adversative

[8]Continuative

[9]Substitution of quantifier for elided *language learners*

[10]Temporal

[11]Additive

[12]Additive

[13]Superordinate for *motivation, aptitude,* and *opportunity*

Both academic and interpersonal domains involve conventionalized categories and types of discourse, called **genres**. Different genres are typically characterized by having different functions within a language community, involving different classes of participants (speakers/writers and audience), addressing different topics, and requiring different language styles and organization. Academic genres include research papers, lectures, and book reviews; interpersonal genres include conversations, service encounters (e.g. ordering food in a restaurant), and letters. Genres are "conventionalized" categories of discourse in the sense that knowledge of their nature and regularities is shared by members of a language community as part of the cultural component of communicative competence.

L2 learners of a language often have to learn new organizational features for a relevant genre as well as new linguistic elements when they wish to join the community that uses it. For example, academic research reports that are written in English commonly follow the following sequence (see Swales 1990):

(1) Statement of the problem under investigation and its potential significance

(2) Specific research questions or hypotheses

(3) Review of related research

(4) Description of data collection and analytic procedures

(5) Presentation of findings

(6) Discussion of results

(7) Conclusion (often including mention of limitations and suggestions for future research)

There is variability in the pattern by discipline (e.g. academic reports differ somewhat depending on whether they are situated in the physical sciences, social sciences, or humanities), but an English-speaking researcher in any subject area would consider it "odd" if a report presented findings before describing data-collection procedures, and a report which

deviated significantly from disciplinary conventions of organization would probably not be accepted in fulfillment of an academic thesis requirement or be published by a professional journal. An example of cultural differences in the organizational pattern of this academic genre is that a Chinese scholar is likely to omit the review of related research, whether writing in Chinese L1 or English L2 (Taylor and Chen 1991). **Contrastive Rhetoric** is an area of research that compares genre-specific conventions in different languages and cultures, with particular focus on predicting and explaining problems in L2 academic and professional writing (see Connor 1996 for a survey of research topics and findings).

Examples of conventional features that L2 learners must acquire for interactional genres include politeness and turn-taking strategies for conversations. Some general (and perhaps universal) rules for politeness have been suggested, such as "Do not impose" and "Help the other person save face" (Traugott and Pratt 1980), but similar communicative behaviors may be interpreted differently in different cultures. Essentially the same act may be perceived as "friendly" in one setting but "rude" in another (e.g. asking a casual acquaintance about their religious or political views, or whether they have children). Appropriate conversational turn-taking in some cultures involves interruptions, overlaps, or simultaneous speaking; some cultures require several seconds of silence before another speaker may begin, with a shorter interval again considered "rude" or overly aggressive.

Transfer of politeness and turn-taking conventions from L1 to L2 in cases where such contrasts exist may not interfere with expression and interpretation of the referential content of messages but can contribute to instances of serious misunderstanding of speaker intent and message tone. Comparative research on interactional genre with particular focus on such factors can be found in the domain of **Intercultural Communication** (see e.g. Scollon and Scollon 2001).

Development of the ability to use elements of L2 discourse appropriately is not unlike the development of other elements of **interlanguage**. It takes place gradually and systematically, and many errors in production can be attributed to either transfer of L1 knowledge in using the L2 or to developmental patterns within the L2 (e.g. Ellis 1997). And as with the other elements, the nature and amount of input to learners largely determines the degree of proficiency that they will attain. The development of academic discourse competence requires reading and hearing an ample number of academic texts within meaningful contexts, and it benefits from feedback on the appropriateness of written production. Development of interpersonal discourse competence requires opportunity for social interaction and the input and feedback that it produces.

Receptive activities

The labeling of reading and listening as "receptive" (as opposed to "productive") activities does not imply that L2 learners perform them passively and without effort. Learners must actively participate in creating meaning from L2 input, or else writing remains merely marks on paper

and speech remains only a stream of noise that people emit through their mouths. We saw examples in Chapter 5 of children and adults who failed to learn a single word of another language even after extended opportunity to do so when they lacked need or motivation. Successful SLA requires active engagement.

Comprehension of written or spoken language involves both **bottom-up** and **top-down** processing. **Bottom-up processing** requires prior knowledge of the language system (i.e. vocabulary, morphology, phonology, syntax, nonverbal structures, and discourse structure) and interpretation of physical (graphic and auditory) cues. Knowledge of vocabulary is needed to recognize words and to understand what they mean; knowledge of morphology is needed to interpret complex lexical elements, as well as to perceive grammatical information that is carried by inflections; knowledge of phonology is needed to recognize spoken words, to segment speech into grammatical units, and to relate written symbols to their spoken form; knowledge of syntax is needed to recognize how words relate to one another, and how they are constituted as phrases and clauses; knowledge of nonverbal structures is needed to understand facial expressions, gestures, and other unvocalized elements of speech; knowledge of discourse structure is needed to interpret stretches of language that are longer than a single sentence.

We can generally assume that sufficient prior linguistic knowledge – except perhaps vocabulary – is automatically (and unconsciously) available to L1 and to highly skilled L2 speakers for interpretation of meaning, but the language knowledge of L2 learners is often insufficient for comprehending written or spoken input. At early stages of learning, bottom-up processing is limited to visual or auditory recognition of the limited set of words and word combinations that have been acquired thus far, and of simple grammatical sequences. When L2 input significantly exceeds these limits, understanding is likely to be fragmentary.

Top-down processing can compensate for linguistic limitations to some extent by allowing learners to guess the meaning of words they have not encountered before, and to make some sense out of larger chunks of written and oral text. For both L1 and L2 speakers, top-down processing utilizes prior knowledge of **content**, **context**, and **culture**, which were shown in Figure 6.1 to be essential components of communicative competence.

Content knowledge is background information about the topic that is being read about or listened to; new information is perceived and interpreted in relation to this base. For example, when early reading in an academic text is related to subject matter that L2 learners have already studied in their L1, that prior content knowledge provides a "scaffold" for understanding new terms and integrating new information in a coherent conceptual framework. Indeed, L2 learners may sometimes know more about the topic of a text than do L1 speakers, and thus be able to make considerable sense of what they read or hear in spite of gaps in their comprehension of specific words and grammatical structures.

Context knowledge includes information learned from what has already been read or heard in a specific text or situation, as well as an understanding
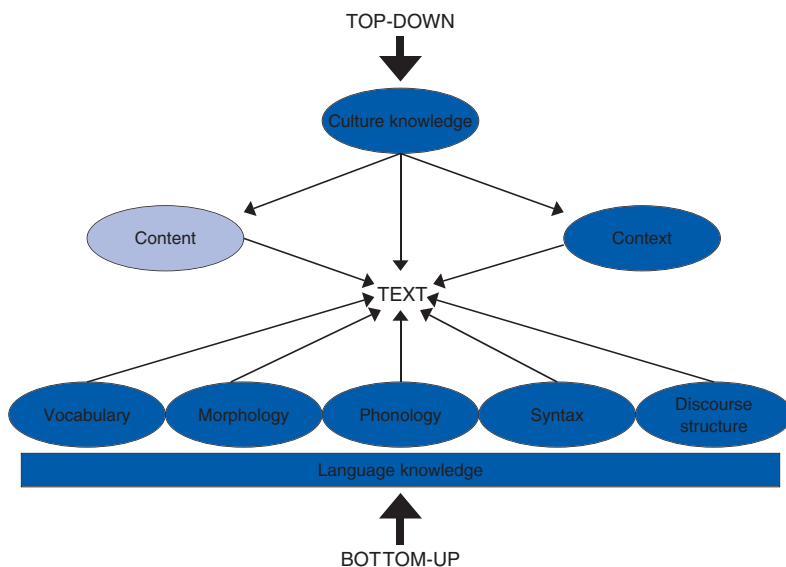
Figure 6.2
Receptive processing

of what the writer's or speaker's intentions are, and the overall structure of the discourse pattern being used; it allows prediction of what is likely to follow, and how the information is likely to be organized.

Culture knowledge subsumes content and context in many ways but also includes an understanding of the wider social setting within which acts of reading and listening take place. Precisely because this knowledge is taken for granted by the writer of the text being read (and often by the teacher in an instructional situation as well), it is rarely expressed explicitly, so that its role in the process of understanding (or conversely, the failure to understand) is rarely recognized. While we can generally assume that many social dimensions of culture knowledge are automatically available to L1 speakers who grow up as members of the native speech community, they are often not within the background experience of foreign language learners.

All types of pre-existing knowledge that readers and listeners bring to the interpretation of text contribute to their **schemas**, or the mental structures that map the expected patterns of objects and events. These types of knowledge are represented in Figure 6.2.

Reading

Reading is the most important area of activity for individuals to engage in for the development of L2 academic competence, and it is important as well for interpersonal functions and for merely "getting along" in any literate society. For many learners, reading is the primary channel for L2 input and a major source of exposure to associated literature and other aspects of the L2 culture. In the case of a language that is used for wider communication (such as English), reading also provides significant input related to technological developments, world news, and scientific

discoveries. Reading ability (literacy) in general is needed not only for access to printed resources such as books and journals but possibly also for access to computers and the Internet. Non-academic situations which require reading range from those which involve interpreting directions on signs and product labels to those which involve receiving news from friends in letters or e-mail.

Grabe (1991) reviews research on fluent academic reading in terms of six component abilities and types of knowledge that are involved in the activity.

(1) *Automatic recognition ability*. Automatic (as opposed to conscious) word perception and identification is necessary for fluency. There is also some evidence that lower-level automaticity is important (e.g. at feature and letter levels), as well as automatic recognition of syntactic structures.

(2) *Vocabulary and structural knowledge*. Fluent reading requires a large recognition vocabulary (some estimates range up to 100,000 words) and a sound knowledge of grammatical structure.

(3) *Formal discourse structure knowledge*. Good readers know how a text is organized, including (culture-specific) logical patterns of organization for such contrasts as cause−effect and problem−solution relations.

(4) *Content/world background knowledge*. Good readers have both more prior cultural knowledge about a topic and more text-related information than those who are less proficient.

(5) *Synthesis and evaluation processes/strategies*. Fluent readers evaluate information in texts and compare it with other sources of knowledge; they go beyond merely trying to comprehend what they read.

(6) *Metacognitive knowledge and comprehension monitoring*. Fluent readers have [unconscious] knowledge about knowledge of language and about using appropriate strategies for understanding texts and processing information. Monitoring involves both recognizing problems that occur in the process of interpreting information in a text, and awareness of non-comprehension.

Fluency in reading takes time to develop in either L1 or L2, but it is an essential aspect of academic competence. Most L2 learners have already learned to read their L1 and thus do not need to begin acquiring this ability anew: there is significant transfer of knowledge and ability from reading in one language to reading in another. The basic concept of deriving meaning from abstract written/printed symbols is the same in most languages, and the same top-down strategies for making inferences, using prior knowledge, and reasoning are applicable. Indeed, level of L1 reading ability is a very strong predictor of how successful students will be in learning to read L2. This is true even when the L1 is represented in a different symbolic writing system (or **orthography**), as when L1 readers of Japanese or Hebrew transfer reading skills to English L2 (e.g. Saville-Troike 1984; Koda 2005; Koda and Zehler 2007). Content knowledge which is applied in the top-down processing of texts is not language-specific for the most part. Concepts that are learned through the medium of one language

still exist in the mind when access to them is triggered through the medium of another. (Of course it is always possible that differences might exist in the structure or content of a concept as it was learned in an L1 and as it is presented or assumed in the L2; the conflict, which may go unnoticed, can lead to misunderstanding or confusion. This conflict can exist as well between varieties of an L1, particularly in the application of vocabulary labels.)

Developing fluency in reading requires acquiring sufficient knowledge of the new language elements (especially vocabulary, but also grammar and discourse structure) for these to be recognized and interpreted automatically, without conscious attention. Achieving automatic recognition requires extensive practice: as is true in many other fields of activity, one learns to read by reading.

Purposeful academic reading is possible even during the beginning and intermediate states of L2 learning, since reading for different purposes does not necessarily require the same level of background linguistic knowledge nor automaticity. Grabe (2002) lists the following functions for reading in academic settings, which are listed here in order of their likely difficulty for L2 learners (from least to most difficult):

- *Reading to find information*: scan or search text for a specific topic, word, or phrase
- *Reading for general understanding*: get the main ideas and at least some supporting ideas and information
- *Reading to learn*: understand the main ideas and store meanings and supporting details in a coherent organizational frame
- *Reading to critique and evaluate*: in addition, reflect on text content, integrate it with prior knowledge, and judge quality and appropriateness of texts in relation to what is already known about the topic

Even a relative beginner can scan text for a specific topic or word, and intermediate L2 learners can comprehend the main ideas and get some supporting information, but reading to learn and critical/evaluative reading are generally achieved only at advanced levels of SLA (though knowledge of discourse/textual schemas and common technical vocabulary can sometimes enable even a relative novice to gather useful information from a text in another language which utilizes a similar orthography).

Beginning L2 reading

Learners whose L1 is written in a different orthographic system from their L2 need to be able to recognize symbols in the target language as an early step, although they may learn to recognize a number of words by their appearance as whole units before they can identify constituent parts. Different types of writing systems are illustrated in Table 6.7: alphabetic, syllabic, and logographic. The sentences given in English (Roman), Lao, and Greek alphabets, Japanese syllabary, and Chinese logographic characters have approximately the same meaning, 'She went to the market.' English L1 learners of Spanish or French L2 share the same Roman alphabet and thus already know the symbols that are used to represent the

Table 6.7 Writing systems of the world			
Alphabets	English	She went to the market.	
	Lao	ລາວໄປຕລາດ	law pa:i thala:t
			she go market
	Greek	πιγε στιν αγορα	pighe stin aghora
			he/she.went to.the market
Syllabary	Japanese	かのじょがマーケットにいきました	kanojo ga maketto ni ikimashita
			she nom. market to went
Logographic	Chinese	她去了市场	ta qu le shi.chang
			she go perfect market

consonant and vowel sounds of those languages. In contrast, English L1 learners of Lao and Greek or Korean must learn rather different sets of alphabetic symbols to relate to consonants and vowels in those languages; learners of Japanese must learn different sets of symbols to relate to larger syllabic (consonant + vowel) units; and learners of Chinese must learn a logo-graphic system in which symbols (or a sequence of two or more symbols) relate holistically to word meanings. The task is made more difficult when the "same" symbols take different forms in print and handwriting, in upper and lower case (as in the Roman and Cyrillic alphabets), or in initial and final word position (as in Hebrew and Arabic alphabets), and when they occur in both "simplified" and "unsimplified" variants (as in Chinese characters). Another difference in writing systems which may be encountered at an early stage is *directionality* (e.g. whether print is to be decoded left to right, right to left, or top to bottom, and which part of a book is the "front").

Learning a new system of graphic representation also requires learning to recognize and interpret new conventions of punctuation. Punctuation provides information about the scope of grammatical constituents within sentences and how they are related, and often signals aspects of meaning that are carried by intonation in spoken language. There are also different conventions for whether punctuation should be used at all, and whether blank spaces should occur between words. (For example, Thai and Lao do not make use of such spaces, and Chinese characters are all equally spaced, regardless of their relation to one another.)

Depending on how much prior oral knowledge of the L2 that learners have before starting to read, rate of progress through beginning stages will vary greatly. Learners who are literate in their L1 and who already recognize a substantial amount of L2 vocabulary and basic grammatical structures can expect to extract a significant amount of information from written L2 text as soon as they can process its graphic representation.

Learners who begin reading L2 without some (prior or simultaneous) exposure to the oral form of the language may be more limited in what they can process (depending on the similarity in the writing systems and the amount of identifiably related vocabulary). Even so, early introduction of reading can be advantageous. The rate of learning (especially of vocabulary) is generally enhanced by having visual as well as auditory input; background knowledge about the topic helps beginners guess meanings of unknown words in context and further enhances incidental learning.

What is acquired in beginning L2 reading is essentially learning how to relate knowledge of different levels of language to graphic representation, along with developing the ability to compensate for limitations in linguistic knowledge through top-down processing. How this is accomplished is largely by transfer of L1 reading processes; transfer is greatly facilitated by selection of content topics which learners have already experienced. (For a comprehensive review of research and its implications for practice, see Grabe 2010.)

Academic reading

Advanced reading ability in both L1 and L2 is usually required to extract detailed information from L2 texts on science, technology, and other subject matter involving both linguistic and nonlinguistic prerequisite knowledge. Prerequisite L2 linguistic knowledge includes:

- A large recognition vocabulary of both basic and subject-specific terms, including their meaning, graphic representation, and probability of occurrence with other lexical items.
- Complex sentence structures, along with punctuation conventions that contribute to syntactic processing.
- Organization features at the sentence level which identify elements that are in focus and distinguish old and new information.
- Organization features at the discourse level, such as how texts are structured and how information is organized (Grabe 2002).

Development of advanced academic reading proficiency requires extensive exposure to written text. Because vocabulary, grammar, and discourse structures differ in the kind of language used for academic versus interpersonal purposes, and in written versus oral channels, academic text material provides the most appropriate source of language input for this purpose. Texts about subjects in the target content area ensure exposure to maximally relevant vocabulary selection and additionally add to the background knowledge that readers can use in top-down processing for meaning. Explicit instruction about language structure is useful in achieving advanced academic reading proficiency in an L2, especially if the instruction includes focus on the more complex grammatical forms that characterize this writing and on ways in which information is organized that may differ from L1 texts. Exclusive focus on conversational L2 usage and simplified written text does not adequately prepare learners to accomplish advanced academic goals.

Once advanced reading proficiency has been attained, it can often be maintained at a high level without help from a teacher and even if there is minimal opportunity for exposure to face-to-face interaction or other sources of continuing L2 input.

Listening

Listening accounts for most of the language input for L1 acquisition by children, but L2 learners often have much less opportunity to hear the target language and therefore receive proportionally less input via this channel. Listening is a critically important activity, however, both for learners who want or need to participate in oral interpersonal communication and for learners who want or need to receive information from such oral sources as lectures and media broadcasts.

One way to classify listening tasks is on a continuum from reciprocal to non-reciprocal communication (Lynch 1998). Participation in face-to-face interpersonal interaction is at the reciprocal end of this continuum, and listening to radio or TV news broadcasts is at the non-reciprocal end. Listening to academic lectures or conference presentations has the potential to be relatively more, or less, reciprocal depending on whether listeners have the opportunity to ask questions of the speaker and participate in discussion. Reciprocal communication requires learners to speak as well as to listen, and to collaborate in the negotiation of meaning. Non-reciprocal communication places heavier requirements on the listener for processing input and constructing meaning "online" or in real time, without being able to request repetition or clarification.

Another way to classify listening activities is according to whether they require general or selective listening (Nida 1953). General listening requires only that listeners get the general gist of the message, while selective listening requires perception and comprehension of important details. The latter type of task is common for academic lectures in which students are expected to note facts such as names, places, and dates, but also occurs in reciprocal interpersonal conversations such as when the listener is invited to be in a certain place at a particular time.

The theory of SLA most commonly used to account for listening phenomena is **Information Processing** (see Chapter 4). The first stage is **input**, or perception which requires noticing relevant auditory cues. This requires much more conscious attention and effort for L2 reception than for L1, especially in early language learning. The next stage is **central processing**, involving both the bottom-up and top-down factors which were discussed above. Bottom-up processing must be under a high degree of attentional control until components of L2 knowledge become automatic, and many linguistic cues to meaning are inaccessible because of learners' limited store of phonological, lexical, and grammatical information. Limits are also imposed by the mental "working space" required for conscious processing, which leaves relatively little capacity for new information and higher-order thought. Top-down factors such as prior content knowledge and expectations may already be automatized and available for integration, even at early levels of L2 learning. While this generally

facilitates comprehension, the unconscious and automatic access that listeners have to prior knowledge of content, context, and culture may be inappropriate in the L2 situation and could account for some misunderstanding. In addition to potential inappropriate transfer of prior knowledge in top-down processing, interference in bottom-up processing commonly results from transfer from a listener's L1 phonological system, as discussed earlier in this chapter.

Beginning L2 listening

Speech in a foreign language is initially perceived as merely a stream of noise. The first step in making sense of what people say is recognizing patterns in recurring sequences of sounds and attaching meaning to them. This begins the process of segmenting the stream of speech into meaningful units: sounds that form words, words that form phrases, and phrases that constitute clauses or sentences. Segmenting speech requires not only perceiving sound, but noticing patterns in relation to a context which allows interpretation. As we have seen, this requires the active engagement of learners.

Beginning L2 learners can begin to create sense from auditory input most easily if:

- They know in advance what the speaker is going to be talking about.
- Key words and phrases are learned as recognition vocabulary elements before they are encountered in connected speech.
- Speakers pause frequently at boundaries between parts of sentences.
- Auditory messages are supported by visual images (including writing).
- The communicative situation is a reciprocal one that allows the listener to seek repetition and clarification, or to ask the speaker to slow down.

Many nonlinguistic factors also influence comprehensibility in beginning L2 listening. Interference can be caused by:

- Poor signal quality (such as static or sound distortion)
- Background noise
- Any distraction of the listener's attention
- Affective features such as anxiety (see a review of factors in Lynch 1998)

Speaker pronunciation is also a factor that influences listener comprehension. Many learners report that they find it easier to understand L2 utterances produced by speakers of their own L1 than by native speakers of the L2, presumably because the speakers' accent is closer to their own phonological perceptual system. However, research on this topic suggests that familiarity with the accent is even more important (Flowerdew 1994). In universities where different native regional varieties of speech are found among instructors (as well as different nonnative accents), students can improve their comprehension by tape-recording classroom proceedings for subsequent "ear-tuning" (or familiarization), as well as for providing opportunities for review of linguistic structures and content. Replay of

recorded L2 speech helps learners "work out what is being said as a prerequisite to understanding what is being meant" (Lynch 2002:47). Considered within the Information Processing approach to SLA, repetition can enhance noticing and contribute to **automatization**, by facilitating faster processing of input, and the ability to process longer segments in "working memory." Video-recording television programs of different genres, especially programs which provide simultaneous closed captioning (or movies with subtitles) can also provide a useful source for listening practice.

Academic listening

Academic listening requires much of the same L2 linguistic knowledge as was listed above for academic reading: a large recognition vocabulary of both basic and subject-specific terms; complex sentence structure; and organizational features at sentence and discourse levels that distinguish new from old information and highlight important content. In addition, academic listening often requires ability to process pronunciation by speakers of different native and nonnative varieties of the language, which can be especially challenging for L2 learners. Tape-recording lectures and other relatively non-reciprocal listening activities is useful for advanced as well as beginning students in such contexts, both for "ear-tuning" and for content review. It often takes several weeks for even advanced L2 learners to understand all of the input they need from lectures and other oral events if they have not had recent extensive experience with listening activities; recordings allow for recovery of information that might otherwise be lost, and for recontextualization of key vocabulary that has been noted for subsequent definition or elaboration.

As with reading, development of advanced academic listening proficiency requires extensive exposure to oral, academic text. Unlike reading, listening proficiency can usually not be maintained at a high level without continuing L2 oral input.

Productive activities

Productive activities for language use involve essentially the same **top-down** and **bottom-up processes** as those for reception. Production (like comprehension) of written or spoken language requires prior knowledge of vocabulary, morphology, phonology, syntax, and discourse structure to access words and combine them into phrases, clauses, and longer units of text. The relatively limited linguistic knowledge of L2 learners at early language learning levels can cause problems in production (as well as interpretation) of meaning, although productive and receptive abilities are in some ways independent of one another. In **top-down** processing, prior knowledge of **content** is the substance of information that a writer or speaker wishes to communicate; knowledge of **context** accounts for writers' and speakers' ability to select from potential linguistic options those which are appropriate to a specific communicative situation, including what should (or should not) be written or said next; prior knowledge of **culture** includes cultural conventions for language use.

Writing ordinarily presumes ability to read (even if only to interpret or review what one has produced), and speaking usually occurs in contexts which also involve listening and in which appropriateness of what is said requires understanding of what others have said and prediction of how they will respond. The knowledge of language that can be accessed for production is only a subset of what may be used for interpretation of language that is used by others; i.e. receptive competence always exceeds productive competence.

Writing and speaking differ from reading and listening in referring primarily to constructing one's own linguistic forms rather than interpreting what others write or say. Key differences between the two productive activities are that (1) writing is typically addressed to readers and speaking to listeners (though written text may be read aloud, and spoken text may be transcribed and read later), (2) writing usually allows time for planning and editing of production while speaking is often unplanned and requires "online" or "real-time" processing, and (3) writing is more likely than is speaking to be disassociated from the immediate time and place of production and from a specific audience. Some L2 learners consider writing to be the easier of these two skills to acquire because it allows them time to consciously access and edit language elements at different levels, but many learners find speaking easier at least in part because it allows them to seek clarification and other types of interactional support from cooperative partners in communication.

Writing

Writing is the most important productive activity for L2 learners to develop if they will use the language for academic purposes, or in certain types of service functions (e.g. providing reports to supervisors or clients). Writing is a common medium for testing knowledge in much of the world – including knowledge of the L2 itself, even within instructional programs that emphasize oral production. L2 speakers who pursue degrees in L2-medium universities typically must display a high level of writing proficiency through standardized entrance examinations and writing samples that are evaluated by admissions committees. Once enrolled in programs, such students must complete papers and other written assignments for many of their classes, and essay examinations are commonly used to judge student progress. Graduate degrees usually require writing extended texts (theses or dissertations), and many disciplines expect advanced students and graduates to publish their work in L2-medium journals and books.

Many professions and occupations also require a high level of L2 proficiency in writing for purposes of formal correspondence or for preparing applications and reports, whether the written texts address L1-speaking individuals and institutions or target speakers of different native languages in multilingual settings. Advanced L2 ability is also required for journalistic and creative purposes when writers wish to reach a wider audience.

Functions of L2 writing may include composing informal letters and e-mail if learners want or need to communicate with speakers of the language outside of an immediate interactional context, and daily life in

some highly literate societies may necessitate at least limited L2 writing ability. However, L2 writing tasks outside of academic and professional situations typically do not have the same demanding standards for accuracy in production as do the more formal contexts of academic writing.

In addition to fulfilling academic and interpersonal functions, the process of writing itself is potentially important because of how it may contribute to successful L2 learning. We saw in an earlier discussion of **Information Processing** (Chapter 4) that meaningful language **output** facilitates SLA in several ways (e.g. Swain and Lapkin 1995). These notably include the following:

- Generating input
- Enhancing fluency by furthering development of automaticity through practice
- Helping learners notice gaps in their own knowledge as they are forced to visibly encode concepts in L2 forms, which may lead them to give more attention to relevant information
- Allowing learners to test hypotheses they have formulated as part of their developing linguistic systems, with opportunity for monitoring and revision
- Providing opportunities for others to comment on problems and give corrective feedback

Because writers must express ideas without recourse to objects and events in their own immediate physical environment or that of their reader(s), or to gestures and other nonverbal means of communication, and without reliance on immediate feedback or hearer cooperation to fill in gaps, writing can potentially push learners closer to the limits of their current level of linguistic knowledge than can speech. We have already seen from a **functional** approach to SLA (Chapter 3) that increased reliance on language structure over situational context to express meaning characterizes progressive change in learners' interlanguage systems. It seems likely that pushing the limits of linguistic knowledge in written production contributes to SLA by stimulating syntactic development.

The need for interaction of other domains of communicative competence with language knowledge is evident when we consider some of the steps that are involved in proficient writing:

- Formulating mental concepts that are to be expressed centrally requires **content knowledge**
- Recognizing what content will be relevant for intended readers, and what will be shared versus new information, requires **context knowledge**
- Constructing text within socially defined conventions of expression (including selecting linguistic forms and organization patterns that are appropriate for the topic, purpose, and audience) also requires other aspects of **culture knowledge**

As in the receptive activities of reading and listening, knowledge of content, context, and culture can partially compensate for limited knowledge

of L2 language elements in writing. However, writing is probably the most dependent of the four language activities on linguistic knowledge.

Beginning L2 writing

As is the case for developing reading ability, learners whose L1 is represented in a different orthographic system from the L2 need to learn symbols for encoding the target language as an early step in acquisition. Adding ability to use a new alphabetic system (as when an English L1 speaker is learning to write Thai or Arabic), a new syllabic system (e.g. Japanese), or a new logographic system (e.g. Chinese) requires extensive practice to develop automaticity. Some learners begin with the low-level task of copying (even tracing over) words and phrases that they recognize by sight, or recording graphically something that they hear spoken. Knowledge of what symbols should be used to represent specific words is part of vocabulary knowledge, along with the meaning, pronunciation, and grammatical features of words.

Transfer of effective language-specific writing processes that have been acquired in L1 to L2 is not possible until a threshold level of L2 structural knowledge has been reached. However, the **content** knowledge for formulating concepts to be expressed and the **context** knowledge for deciding relevance and appropriateness are not language-specific and thus may be accessed even when knowledge of L2 linguistic elements is very limited. More complex thinking can be involved in composition if these domains are initially associated with L1 linguistic structure and then encoded (insofar as possible) into L2. This allows attention to be focused on content and context (since L1 linguistic forms can be accessed automatically), and then shifted consciously to L2 forms of expression.

Many L2 learners feel more secure if they are given a model to follow in early stages of writing, so that they only need to make minimal linguistic changes and substitutions in what someone else has produced to construct their "own" text. At a very early level, for instance, they might be asked to revise the account of an event to include multiple participants rather than a single participant, or to change the time frame from present to past. This type of tightly controlled writing exercise was popular when behaviorism was the dominant theory of SLA and "free" writing was thought to present occasions for production errors and thus "bad" habit formation. Controlled writing exercise has some value in developing automaticity in accessing and producing mechanical elements, but it does not push learners to the limits of their current level of linguistic knowledge in a way that is likely to benefit interlanguage development, and it may create an overreliance on following models which inhibits individual expression at later stages of development. A few students remain so dependent on following models in L2 writing that they approach or cross the border of "plagiarism" when they are in settings where more independence and originality are mandated.

Academic writing

Effective academic writing requires considerable knowledge of linguistic elements at levels of vocabulary, morphology and syntax, mechanics of

orthographic representation and punctuation, and conventions related to style and organization of presentation that are appropriate for the target genre. Command of a relatively formal register is needed, and accuracy in production is usually very important. The activity has received a great deal of attention in recent years from perspectives of Contrastive Rhetoric (mentioned above in the section on Discourse), needs assessment (e.g. Leki and Carson 1997), and the relationship between L2 academic writing research and pedagogy (e.g. Swales and Feak 1994). Courses exclusively devoted to academic L2 writing are now commonly offered in universities and language institutes, and many teacher training programs schedule a methods course which focuses on this activity. Assessment of writing is also now included in standardized tests of language proficiency, including the TOEFL Test of Written English and the British Council's IELTS writing sub-test, as well as in general tests such as the Graduate Record Examination (GRE).

The relatively formal register needed for most academic writing may conflict with the relatively informal register that is often emphasized in "communicative" language teaching. This underlines the need for teachers and students to consider *why* an additional language is needed before determining priorities for *what* must be learned. It is probably in the best interest of most English L2 learners of the world to aim for a formal register before an informal one (neither is inherently more difficult). It is perfectly possible (as the experience of generations of language learners around the world has shown) to become proficient in writing a language well with little experience in either hearing it or speaking it. (For a comprehensive review of research on L2 writing, see Leki, Silva, and Cumming 2008.)

Speaking

Speaking (in conjunction with listening) is a very important area of activity for L2 learners if they will be using the language for interpersonal purposes, whether these are primarily social or instrumental. There is need for speaking in virtually all situations where L2 learners participate in the L2 speech community: tourists generally need to ask directions and seek information about hotels and entertainment; immigrants need to shop for goods, seek services, and describe symptoms in case of health problems; foreign students and other temporary residents need to negotiate transactions for housing, utilities, and currency exchange, as well as to express themselves in an academic or professional speech genre.

The language knowledge involved in bottom-up processes for speech production includes appropriate vocabulary, features of pronunciation, grammatical patterns that will convey intended meaning, realization of how nonverbal elements are likely to be interpreted, and understanding of discourse structures that will provide cohesion and coherence within a conversation or other spoken communicative event. The top-down processes simultaneously involved in speech production require content knowledge about a topic, cultural knowledge that informs determination of proprieties and provides macrosocial context for expression, and

knowledge of microsocial context such as the significance of the immediate communicative activity, speaker role and relationship to addressees, and appropriateness conditions (e.g. what must be said, what may be said, and what should be left unsaid).

As with listening, speaking tasks can be classified on a continuum from reciprocal to non-reciprocal communication. Participation in face-to-face interpersonal interaction is at the reciprocal end of this continuum, and delivering lectures or conference presentations is close to the non-reciprocal end. Reciprocal communication requires learners to listen as well as to speak, and to collaborate in the negotiation of meaning. Unlike listening, non-reciprocal spoken communication places lighter requirements on the speaker for processing "online" or in real time than reciprocal, since there is usually time for preplanning. Indeed, the L2 learner may even read aloud a paper which has been written beforehand.

A linguistic approach to SLA that is commonly used to account for speaking phenomena is **Functionalism** (Chapter 3), which considers the development of learner language to be motivated and furthered by interactive language use. Psychological approaches (Chapter 4) explain L2 speaking proficiency largely as degree of automaticity in processing. A major social approach relates to L2 variation (Chapter 5), which explores how contextual dimensions influence quality of learner language production. From this social perspective, fluency and accuracy in speech activities may be attributed to how much attention the speaker is paying to linguistic form, intellectual demands of a task, level of formality, setting of interaction (e.g. public or private), and relationship of speaker and addressee, as well as to linguistic contexts.

Speech acts

An important concept for SLA which was originated in the field of philosophy (Searle 1969) is that language use accomplishes speaker goals by means of utterances which request something, apologize, promise, deny, express emotion, compliment, complain, and so forth. Utterances which fulfill such functions are called **speech acts**, and they constitute most of what is said by people in the course of interpersonal communication. The same acts can be accomplished in the use of any language with others who understand that language, but the actual forms and conventions that can be used are of course language-specific. Learning how to perform these acts in the L2 is central to language learning, and knowing when to deploy them is basic to what we have called **pragmatic competence**.

A variety of linguistic forms may be selected to accomplish any one speaker goal, with appropriate choice for a particular situation requiring cultural and contextual knowledge. For example, a student who wishes to borrow another student's notes to study for a test might say (in English):

Give me your notes.
Please let me make a copy of your notes.
You are a much better note-taker than I. Would you help me prepare for this test?
Could I take a little peek at your notes before the test?

Appropriate selection from among these and other possibilities depends on the relative social status of the speaker and addressee, the closeness or distance of their relationship, and the degree of imposition the request involves. Conditions do not receive the same weight in different cultures and do not receive the same interpretation, so the appropriate L2 selection of linguistic form is not a simple translation from what would be appropriate in L1. Acquisition of this aspect of L2 communicative competence requires adding new knowledge of culture and context. (Research methods, findings, and implications of Speech Acts for the study of SLA are surveyed in Cohen 1996.)

Other aspects of speaking competence

Other aspects of communicative competence which need to be acquired especially for successful participation in conversational speech activities include the following:

Knowledge of conversational structure. Possible differences in rules for turn-taking were discussed above in the section on Discourse: some languages consider interruptions, overlaps, and simultaneous speaking to be appropriate; some consider a period of silence between speakers to be a necessary condition for "polite" interaction. There are also linguistic and cultural differences in the sequence in which turns of talk are expected to occur (e.g. according to age or social status), and in production of **backchannel signals** (e.g. verbal or nonverbal indications by a listener of comprehension or lack of it). Conversational structure also involves rules for topic maintenance and shift, and for which utterances should be tied as **adjacency pairs** (e.g. whether a question should be immediately followed by a response, or a compliment by an acknowledgment, and especially what response or acknowledgment is appropriate or inappropriate).

Knowledge of contextualization cues. **Contextualization cues** (Gumperz 1977) are elements of communication that allow people to express and interpret meaning beyond the referential meaning that the surface structure of messages provides. Cues may involve any of the linguistic knowledge we have considered, including speaker selection of vocabulary and pronunciation, prosody (intonation and stress), and rhythmic patterns (pauses and stops). Beyond this level, they involve sociocultural knowledge that matches linguistic forms to culture-specific expectations and allows appropriate interpretation of meaning within the contexts of use. People rely on such cues to make inferences about what is not explicitly said, and to identify speakers' expressive overtones. Because knowledge of contextualization cues depends on cultural and communicative experience, this is a potential minefield of significant misunderstanding for L2 learners and others they are interacting with. Successful acquisition is most likely to be realized in situations where learners have opportunity for feedback from culturally sensitive native speakers, since the cues cannot be described abstractly and are elusive targets for formal instruction.

Knowledge of communication strategies. A final aspect of communicative competence we will consider here is learner knowledge of how to compensate for limitations in their L2 linguistic resources, or **communication**

Table 6.8 Typology of communication strategies

1 Avoidance	
(a) Topic avoidance	Avoiding reference to a subject for which the learner lacks necessary vocabulary
(b) Message abandonment	Giving up on a topic because it is too difficult to talk about
2 Paraphrase	
(a) Approximation	Using a word that is not correct, but that refers to a similar object or event
(b) Word coinage	Making up a new word or phrase to describe an object or event
(c) Circumlocution	Describing an object or event instead of using an appropriate vocabulary item
3 Conscious transfer	
(a) Literal translation	Translating word for word from the L1
(b) Language switch	Inserting L1 words or phrases into L2
4 Appeal for assistance	Asking a native speaker, looking a word up in a dictionary, or consulting some other authority
5 Mime	Using gestures or other nonverbal means to refer to an object or event

strategies. This includes knowledge of how to assess and repair misunderstanding, how to make use of interlocutor collaboration, and how to sustain interpersonal interaction. The basic problem that the strategies address may be formulated for early stages of SLA as: "how do you manage to communicate when you have limited command of a language?" (Bialystok 1990:vi). Use of the term "strategies" implies that means of remediation for the problem may be conscious and intentional, although they need not be.

The types of strategies that were suggested by Elaine Tarone (1977), along with a brief description of each, is given in Table 6.8. Knowledge of communication strategies is particularly important for early L2 learners who want and need to participate in speaking activities because they allow talk to continue in a situation when it might otherwise cease. Continuation of talk, in turn, provides learners with more input, more practice, and more opportunity for collaborative construction of meaning.

Chapter summary

Second language communicative competence involves both knowledge of language elements and the knowledge that is required for appropriate L2 use in different contexts. In this chapter, we have surveyed the integrated roles of linguistic, cognitive, and social knowledge in the interpretation and expression of meaning; we have looked in more depth at components of language knowledge that must be accounted for in academic and interactional competence; and we have explored what knowledge accounts for learner ability to participate in L2 activities and how it is acquired.

What must be acquired in learning an L2 can vary as much as the goals for learning. It is possible to develop fluent reading ability in an L2 with only a limited awareness of its pronunciation or rules for appropriate social use, though a knowledge of grammar and vocabulary are determinative. At the other extreme, the achievement of fluent speaking as interactional ability can take place without a knowledge of reading and writing, but again the role of grammar and vocabulary are significant. However, the grammatical forms and structures as well as the vocabulary needed for successful informal interpersonal communication can be vastly different from those required for advanced academic study, using the L2 as a medium for learning complex content and writing to meet academic requirements. Curricula for teaching L2 should be differentiated according to the relevant goals of learning, since a "one-size-fits-all" approach, such as a purely communicative approach, may do a serious disservice to learners whose primary need is to develop academic reading, writing, and listening skills.

Learning an L2 can be facilitated or made more difficult by degrees of similarity or difference between L1 and L2 phonology, grammar, vocabulary, system of writing, and rules for social use. A Japanese or Korean speaker already familiar with borrowed Chinese characters will find it easier to gain fluency in reading and writing Chinese than will an English speaker familiar only with the Roman alphabet (even though all three languages are equally unrelated to Chinese). Conversely, while an English speaker will find the acquisition of French or Spanish facilitated by similar alphabets and numerous shared vocabulary (particularly in more advanced technical and academic fields), as well as grammatical parallels, a Chinese, Japanese, or Korean learner of English or French will find them equally daunting since there are few recognizable cognates and the alphabets are equally unfamiliar.

Learners of an L2 for academic purposes need to focus on building receptive processing ability in listening and reading, though this can be greatly aided by using familiar content knowledge to help interpret the linguistic input. L2 learners with primarily interpersonal interactional goals need to develop very different abilities, emphasizing rapid online processing of often highly elliptical and sometimes fragmented speech, as well as a different core of "everyday" vocabulary and rules for appropriate social usage which may be encoded in subtle or obvious lexical and intonational ways.

Activities

Questions for self-study

1. _____ competence encompasses knowledge required of learners who will use the L2 mostly in face-to-face contact with other speakers, whereas _____ competence encompasses the knowledge required of learners who will use the L2 mostly as a tool for learning, research, and scholarly exchange.

2. Receptive activities, such as _____ and _____, function primarily in processing input. The ability for productive activities, such as _____ and _____, usually follows the development of receptive ability.

3. Halliday and Hasan (1976) discuss types of cohesion (reference, substitution, ellipsis, conjunction, and lexical) used in English. Read the following paragraph and underline all the cohesion devices used. Then classify each device per Halliday and Hasan's typology.

    Second language communicative competence involves both knowledge of linguistic elements and the knowledge that is required for appropriate L2 use in different contexts. In this chapter, we have surveyed the integrated roles of linguistic, cognitive, and social knowledge in the interpretation and expression of meaning; we have looked in more depth at components of language knowledge that must be accounted for in academic and interactional competence; and we have explored what knowledge accounts for learner ability to participate in L2 activities and how it is acquired.

4. Bottom-up processing requires prior knowledge of the language system. List at least one way that processing involves each of the following levels of language: vocabulary, morphology, phonology, syntax, and discourse.

5. Top-down processing utilizes prior knowledge of essential components of communicative competence (content, context, and culture). List at least one way for each that content, context, and culture help with top-down processing.

6. List at least three conditions under which beginning L2 learners are most likely to be capable of making sense out of auditory input.

Active learning

1. Two types of communicative competence are academic competence and interpersonal competence. In your own studies of an L2, which one of these was stressed? Thinking of your goals for that L2, was it the right one for you? Give examples from your life to explain why.

2. The level of L1 reading ability is a very strong predictor of success in L2 reading ability. Has this been true in your life? What is your attitude toward reading in L1 versus in L2? Why do you feel this way?

3. Grabe's four functions of reading in academic settings – reading to find information, reading for general understanding, reading to learn, and reading to critique and evaluate – are described on p. 166. Which of these functions do you use in your L2? Which ones are more and less challenging for you? More or less interesting? Why?

4. Listening, speaking, reading, and writing are seen as essential activities for L2 use in an academic context, and often in interpersonal communication as well. Do you feel any of these skill areas are stronger in your own L2 use? Why do you think that is?

5. We have seen thus far that some L2 learners have a higher degree of success than others. Taking into consideration linguistic, psychological, and social factors, what do you see as most crucial to the success of L2 learning? Why?

6. Many nonverbal structures have different meanings in different cultures, such as differences in what is considered appropriate space between people when conversing, who may touch whom, and facial expressions. Think of a time that you conversed with someone and were uncomfortable or dissatisfied with the exchange, but could not really say why. Was nonverbal communication part of the equation? For example, was the person too close or too far away, or smiling too much so as to seem insincere (as French often report with Americans)? Now think of someone you feel very comfortable communicating with and consider how you use nonverbal structures together.

Further reading

Hinkel, E. (ed.) (1999). *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press.

Part I, "Culture, interaction and learning," contains three chapters relevant to competence and use of L2 in the classroom. Chapter 1 discusses some implications of interaction between teachers and students of different cultural backgrounds. Chapter 2 treats the learning of a second culture from a cognitive perspective. Chapter 3 also explores interactions between people of different cultural backgrounds, specifically studying if and when L2 speakers understand certain implications of conversation in the target language.

Rose, K. R. & Kasper, G. (eds.) (2001). *Pragmatics in Language Teaching*. Cambridge: Cambridge University Press.

In this volume, Rose and Kasper have concentrated on the question of the viability of teaching and testing pragmatics, with studies all relating to pragmatics in second language teaching and testing (including sections on the theoretical and empirical background of pragmatics, issues in classroom-based learning of pragmatics, the effects of instruction in pragmatics, and testing pragmatics).

Saville-Troike, M. (1996). The ethnography of communication. In S. L. McKay & N. H. Hornberger (eds.), *Sociolinguistics and Language Teaching* (pp. 351–82). Cambridge: Cambridge University Press.

Saville-Troike presents Dell Hymes' (1966) notion of the ethnography of communication, including discussion of appropriate situations to use different registers and features of language, and different areas of competence necessary for successful L2 communication.

Bialystok, E. & Hakuta, K. (1994). *In Other Words: The Science and Psychology of Second-Language Acquisition*. New York: Basic Books.

Bialystok and Hakuta's final chapter, "Last word," treats the fact that the learners' diverse experiences and goals produce different results in their L2 acquisition. Further, their differences in goals and outcomes cannot be classified as more or less successful, only different.

Swan, M. & Smith, B. (eds.) (2001). *Learner English: A Teacher's Guide to Interference and Other Problems*. Cambridge: Cambridge University Press.

This book offers insight on common characteristics of English as it is learned and produced by native speakers of a variety of other languages.

McCafferty, S. & Stam, G. (eds.). (2008). *Gesture: Second Language Acquisition and Classroom Research*. London: Routledge.

This book is perhaps the first to discuss the importance of gesture as a part of communication within the field of SLA, and includes an overview of gesture studies and gesture in second language research.

Celce-Murcia, M. & Olshtain, E. (2000). *Discourse and Context in Language Teaching: A Guide for Language Teachers*. Cambridge: Cambridge University Press.

    Part 1 presents background in discourse analysis and pragmatics in discourse analysis. Part 2 covers some components of language knowledge with chapters on phonology, grammar, and vocabulary. Part 3 treats receptive and productive activities, with chapters on listening, reading, writing, speaking, and an epilogue about the integration of these four areas.

Flowerdew, J. (ed.) (1994). *Academic Listening: Research Perspectives*. Cambridge: Cambridge University Press.

    While this text is not geared towards beginners to the field of SLA, this seminal volume presents original research on academic listening in a second language from various perspectives (ethnography, discourse analysis, application of theory to pedagogy).

McKay, S. L. (1996). Literacy and literacies. In S. L. McKay & N. H. Hornberger (eds.), *Sociolinguistics and Language Teaching* (pp. 421–45). Cambridge: Cambridge University Press.

    This article presents literacy as an individual skill and a social construct, and it recognizes the multiple kinds of literacy possible and valued in different communities and aspects of communication.

Hinkel, E. (ed.) (1999). *Culture in Second Language Teaching and Learning*. Cambridge: Cambridge University Press.

    Part II of this edition focuses on how culture influences writing. Chapter 4 questions whether nonnative speakers of English should learn to write according to the western norms underlying Anglo-American academic writing (such as Aristotelian logic). In Chapter 5, the author uses quantitative research to present how L1 and L2 users try to create a sense of objectivity and credibility in their academic writing. Chapter 6 is an ethnographic report of how culture is treated in ESL writing classrooms.