Chapter 2

Comparing L1 and L2 reading

This chapter highlights differences that exist between first-language (L1) and second-language (L2) reading contexts and readers. In addition, it explores how those differences might influence classroom instruction. Three major types of differences form the core of the discussion:

- linguistic and processing differences
- individual and experiential differences
- socio-cultural and institutional differences

One of the more difficult tasks we face as reading teachers is deciding how to make use of reading research for our own purposes. The research on reading comprehension in L1 contexts is extensive and complex. Research studies have looked at children and students ranging from 3-year-olds to university level. Some studies have explored comprehension by varying the purposes for reading through a number of different tasks. Others have emphasised different skills that are usually considered part of reading comprehension. For example, some studies focus on reading strategies, others explore vocabulary development, others examine the role of discourse organisation and text structure, and yet others emphasise word recognition and reading fluency. Students participating in these studies have come from a range of social and ethnic backgrounds, with varying motivations and attitudes toward reading. As one might imagine, this range of emphases and reader variables makes it hard to generalise from the research literature to any one specific classroom context.

In L2 contexts, the issues become even more complex. L2 students and research settings can vary as widely as those described for L1 contexts. In addition, L2 students have much wider ranges of language proficiencies, unlike most L1 readers who have considerable tacit grammar knowledge.
by the time they begin to read. Many L2 students have often already had experiences learning to read in an L1, more or less successfully (though others may have no L1 literacy experience). Moreover, they come with linguistic knowledge of their L1, even if most of it is tacit knowledge, and this knowledge can either support the transfer of reading skills or become a source of interference. Research efforts in L2 contexts also extend beyond the array of issues pertinent to L1 studies. For example, they explore the role of low-level language proficiency on reading, or they explore the impact of transfer at various ability levels, on various processes (e.g. word recognition, syntactic parsing, strategy use), and with different knowledge resources (e.g. general background knowledge, specific topical knowledge and cultural knowledge). Adding more complexity to L2 contexts are the comparisons between bilingual children and children who learn an L2 subsequently to their L1.

Aside from the additional complexities for research in L2 contexts, there are logistical difficulties with carrying out large-scale studies in many L2 settings because many sites for research cannot track L2 students for long periods of time. Moreover, the follow-up research that commonly occurs in L1 settings is less frequently done in L2 settings. There are also fewer L2 reading researchers to carry out such projects. These factors make it more difficult to assert wide generalisations from research in L2 contexts. Strong generalisations can only be developed for L2 reading after several near-replications of a research study across a number of L1 groups, across L2 proficiency levels and across socio-cultural and institutional learning contexts.

The differences between L1 and L2 reading contexts, however, go beyond numbers of studies and limitations of research methodology. L2 reading must account for issues that are qualitatively different from L1 issues. L2 learners, while learning to read, must broaden their linguistic knowledge at the same time, deal with transfer effects, and learn to use L2-specific resources (e.g. translation, glosses, bilingual dictionaries), among many other factors. If this were not enough, the L2 reader learns to read in the L2 with a two-language processing system. This is to say, reading in an L2 is supported by a two-language system (L1 and L2 together) rather than just an L2 system. (The L1 never completely turns off.) All of these factors suggest that L2 reading can be quite different from L1 reading.

This chapter outlines 14 ways in which L2 reading comprehension processes and instruction may differ from L1 contexts. We have divided the 14 differences into three general areas: linguistic and processing differences, individual and experiential differences, and socio-cultural and institutional differences. The chapter closes by depicting the L2 reader as one who engages in multi-language processing whenever he or she reads.
2.1 Linguistic and processing differences between L1 and L2 readers

This section presents six major differences between L1 and L2 readers involving vocabulary, grammar, discourse, orthography and metalinguistic and metacognitive issues (see Table 2.1). The linguistic and processing issues inherent in these differences are actually the most widely studied aspects of reading development and quite a bit of research can help us understand these differences and their possible impact on reading comprehension abilities. These differences highlight issues related to language transfer, an L2 threshold, differences across various student L1s and the simple fact that two languages are involved in comprehension processing in L2 settings.

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2.1.1 Differing amounts of lexical, grammatical and discourse knowledge

As a first difference, most L1 students first learn to read after they have been learning their L1 orally for 4–5 years. In the US, students typically begin to read (formally) at the age of 6, in the first grade. By this time, they have learned most of the basic grammatical structures of their L1 as tacit knowledge (Finegan, 2008; Tomasello, 2003). Further learning of the language structures commonly used in written texts continues regularly through the age of 12, but most of the basic structures are already well learned. Estimates of the vocabulary knowledge of a 6-year-old vary considerably, but a commonly agreed upon range is 5000 to 7000 words (Cunningham, 2005). That is, a 6-year-old in the first grade knows about 6000 words when reading instruction begins. These linguistic resources provide a tremendous boost for young L1 students beginning to learn to read. It does not take much reflection to recognise how different this situation is from most L2 contexts (Grabe, 2009).
Unlike the L1 student’s initial linguistic resource base, many L2 students begin to read simple sentences and passages almost at the same time that they learn the language orally. Other L2 students, primarily in academic reading courses, are not even expected to increase their oral L2 abilities to keep up with their reading development. It is true that curricula in certain L2 contexts (e.g. in elementary-school ESL and bilingual settings in the US, the UK and Australia) encourage oral use of the L2 before a student begins to read, but this encouragement is extremely variable and also controversial as a curricular principle.

In most cases, the vocabulary and grammar knowledge of the beginning L2 student marks a very different starting point from that of the beginning L1 reader. One obvious implication of these differences is that having L2 students sound out a word to ‘discover’ its meaning is likely to be less effective than it is in L1 settings (though not without value in L2 contexts). Beginning L2 students do not have a mental resource of several thousand words stored in their heads to be matched with the newly sounded-out word. Thus, one benefit of developing accurate letter–sound correspondences as a support for reading is lost in most L2 settings; that is, L2 students cannot match a sounded-out word to a word that they know orally because they do not yet know the word orally.

The lack of tacit L2 grammatical knowledge and discourse knowledge also suggests that L2 students need some foundation of structural knowledge and text organisation in the L2 for more effective reading comprehension. How much of a grammar and discourse foundation is needed is an open question, and one that is likely to vary considerably depending on the students being taught. Arguments that L2 readers do not need knowledge of grammar, occasionally voiced in the L2 literature, are clearly wrong (see Alderson, 2000; Grabe, 2009; Khalifa and Weir, 2009). Knowledge of discourse organisation may be very important for students who read L2 texts in more advanced academic settings, and patterns of discourse organisation may need explicit attention. Sometimes, students may know most of the vocabulary and understand the main concept(s) of a text, but they may not follow the specific development of the text, the new information being presented or the arguments being made. In some cases, L2 students may not be fully familiar with overall genre expectations of certain types of texts (e.g. newspaper stories, biographies, abstracts, reports, memos, editorials). Students recognise that something is not working the way they expect, but they do not know why.

2.1.2 Greater metalinguistic and metacognitive awareness in L2 settings

The general need to teach vocabulary, grammar and discourse structure in L2 settings from the very beginning acts as a support for early reading
development and highlights our second L1–L2 difference: L2 readers often develop a greater awareness of the L2 itself as part of their reading resources, unlike L1 readers who typically have a more tacit knowledge of their native language (Koda, 2008). In many L2 contexts (but not all), a good part of the students’ knowledge of the L2 results from direct instruction in the classroom, or it comes about indirectly through instructional tasks, projects and outside reading. In these cases, students develop a greater metalinguistic awareness as a resource for reading. With the recent emphasis on awareness and reflection for language learning in L2 contexts, more L2 students now discuss, and reflect on, the linguistic resources (e.g. vocabulary, morphology, grammar and discourse knowledge) that they use to assist them in comprehension. Unlike the tacit knowledge that is typical of L1 learners, many older L2 students are thus able to discuss and reflect on the linguistic resources available to them.

A natural extension of linguistic awareness is a more developed metacognitive awareness of the learning that takes place while reading in the L2. Many students growing up bilingually or in L2 environments may approach L2 reading with many of the tacit resources of the L1 student; yet, a large percentage of L2 students approach L2 reading with quite different linguistic and learning backgrounds, beginning with minimal L2 knowledge. In many L2 academic settings and foreign language settings, L2 students only begin to read in their L2 after they have been learning literacy skills and content knowledge for several years in their

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**Quote 2.1**

Knowledge of structure is clearly important in efficient and strategic processing of text.

Goldman and Rakestraw (2000, p. 323)

Knowledge about text genre is an important factor in reading comprehension. … Readers unaware of [text] structure will likely not have a plan of action for a particular text and may gain information from that text in a random manner, whereas those who are aware of the way a text is structured are better able to organize information as they read.

McCarrle, Chhabra and Kapinus (2008, pp. 145–6)

Any sort of systematic attention to clues that reveal how authors attempt to relate ideas to one another or any sort of systematic attempt to impose structure upon a text, especially in some sort of visual representation of the relationships among key ideas, facilitates comprehension as well as both short term and long term memory of the text.

Pearson and Fielding (1991, p. 832)
L1s. As a result, they develop a greater awareness of (a) how they have learned to read because of their instructed L2 learning efforts, (b) what learning strategies can work for them and (c) how language knowledge can support literacy development. L2 students can more easily bring their metalinguistic knowledge (see Concept 2.1) to a conscious level to provide strategic support or understand comprehension failure (and in the process, become more strategic readers). For example, while we do not believe that all L1 reading strategies transfer automatically to L2 reading contexts, it is still far easier to raise learner awareness of, and practice with, strategies that have been productive for them in L1 situations than would be the case with strategies that have never been used before by learners.

**Quote 2.2**

Recently, much attention has been devoted to a particular kind of metalinguistic ability, phonemic awareness (i.e. the ability to reflect on and manipulate phonemes, the individual units of sound out of which spoken words are constructed). However, other types of metalinguistic awareness, such as morphological awareness and syntactic awareness, are also believed to play an important role in reading.

Nagy and Scott (2000, p. 274)

**Quote 2.3**

Greater involvement of [metalinguistic analysis and control processes] makes tasks more difficult, and this difficulty results in behavior appearing to be increasingly metalinguistic. However, no specific boundary in the development of either process signals a category shift into metalinguistic performance; it is a gradual transition into a continuously evolving domain.

Bialystok (2001, p. 177)

**Quote 2.4**

Roeschl-Heils et al. (2003) examined interrelations among metacognition, motivation, and comprehension among seventh- and eighth-grade students. . . . A regression analysis showed that metacognitive knowledge accounted for more than 25% of the variance in reading comprehension, with reading self concept (motivation) adding an additional 5%.

Varying linguistic differences across any two languages

Linguistic differences across any two languages are likely to vary considerably, and these differences may influence L2 reading comprehension variably when students come from different L1s and are in the same L2 classroom. For example, students whose L1 is a Romance language (e.g. Spanish, French, Italian, Portuguese) tend to pay greater attention to the ends of words because there is much more grammatical information in the suffixes of their L1s than in English. As another example, words in languages such as Hebrew and Arabic, which have greater morphological complexity with embedded grammatical information, are read more slowly than words in a language such as English (Geva, 2008). Another illustrative example involves Czech-speaking children who demonstrated greater awareness of consonant clusters and complex consonants than did English-speaking children (Caravolas and Bruck, 1993). Another difference, which has been supported in multiple studies, reveals that readers of Chinese and Japanese make greater use of visual processing than do readers of English because of their L1 orthography (Hanley, Tzeng and Huang, 1999; Koda, 2005). There is also evidence that these differences lead to variation in reading rates and fluency in word processing, though these specific issues need much more research before any implications might be suggested for instruction (Koda, 2005, 2008).

Two further differences across L1s with more general implications for L2 reading include orthographic differences and the extent of shared vocabulary or cognates. With regard to orthographic differences across

Concept 2.1  **Metalinguistic and metacognitive knowledge**

**Metalinguistic knowledge**: Our knowledge of how language works. Metalinguistic knowledge includes knowledge of letters and sounds and how they relate, knowledge of words and word parts, knowledge of sentences and their parts, and knowledge of texts and genres and how they are organised.

**Metacognitive knowledge**: Our knowledge of what we know. Simply put, this knowledge permits us to reflect on our planning, goal setting, processing of tasks, monitoring of progress, recognition of problems and repair of problems. Metacognitive knowledge represents a basic way to understand learning strategies and, especially, our explicit and conscious use of reading strategies.

In both cases, our knowledge includes not only what we know (declarative knowledge) but also how we use this knowledge (procedural and conditional knowledge). In both cases, it is not straightforward to assert a separation between linguistic and metalinguistic knowledge, or between cognitive knowledge and metacognitive knowledge (see Quotes 2.3 and 2.4).
languages, differing orthographies are more or less transparent with respect to **letter–sound relationships** (sometimes referred to as the Orthographic Depth Hypothesis, see Concept 2.2). That is, depending on the transparency of the orthography, a reader looking at a word will be able to sound out the word’s (or activate the word’s sounds in working memory) more or less easily. Some languages are seen as completely transparent (e.g. Serbo-Croatian, Finnish, Turkish); others are quite transparent (e.g. Greek, Italian, Spanish), and some a bit less so (e.g. German, Swedish); some are relatively more opaque (e.g. French, Danish), and some very opaque for an alphabetic language (e.g. English). Consonantal alphabetic languages are yet more opaque (e.g. unpointed Hebrew and Arabic), and some are very opaque (e.g. Japanese and Chinese are not alphabetic scripts) (Frost, 2005; Perfetti and Dunlap, 2008). The key issues here revolve around what happens when a reader with a transparent L1 begins to read in a less transparent L2, or, what happens when a reader with a less transparent L1 begins to read in a transparent L2. In both cases, if both languages are fully alphabetic, there should be positive transfer to the L2 (Geva and Siegel, 2000; Harris and Hatano, 1999a). In effect, as soon as a reader understands the concept of letter–sound correspondences in an L1, this ability seems to transfer to reading in another alphabetic language (Bialystok, 2002).

At present, while recognising the many other factors that influence reading, the research suggests that readers process words differently in transparent and opaque orthographies. In general, L2 students tend to draw on L1 processing skills when they try to read the L2, although the tendency influences beginning L2 reading more than advanced L2 reading.

**Quote 2.5**

The heavy processing demands associated with morphemic [complexity] play a role even in the text-reading speed of highly literate bilingual Hebrew–English adults. . . . It is not only lack of L2 linguistic proficiency that slows down text reading for L2 beginners, but also the high morphemic density associated with inflected languages such as Hebrew.

Geva, Wade-Woolley and Shany (1997, p. 140)

L1 processing experience has a lasting effect on the formation of L2 morphological awareness, thus accounting in part for performance variations in L2 lexical processing among ESL learners from typologically diverse L1 backgrounds.

Koda (2000, p. 315)
For example, in beginning L2 adult reading, students must adapt from a lifetime of efficient word recognition processing in the L1 to accommodate word recognition processes in the L2. Increasing evidence suggests that the orthography of a student’s L1 will influence L2 reading development even among advanced L2 readers (Koda, 2005, 2008). Understanding more about a student’s L1 literacy skills and orthography may help explain possible L2 difficulties in word recognition, fluency and reading rate (Koda, 2008).

The final issue involving differences across L1s, and differences across any two languages (L1s and L2s), relates to the role of cognates. The development of L1 reading does not involve the use of cognates as support for reading comprehension. In L2 contexts, however, cognates may play a large role in supporting reading comprehension, depending on the particular L1 and L2. For example, for interesting historical reasons, French and English share thousands of cognates, and they are particularly useful at more advanced levels of reading. By extension, Spanish, Portuguese and Italian all share thousands of useful cognates with English. In cases where a student has a Romance language as an L1, and is learning...
to read in English, cognates represent a significant resource if we help students to recognise and use them (Nagy, García, Durgunoglu and Hancin-Bhatt, 1993). When students come from an L1 such as Chinese, there are very few cognates to assist them in L2 reading development.

2.1.4 Varying L2 proficiencies as a foundation for L2 reading

L2 proficiency plays a large role as a foundation for L2 reading (often discussed in the context of the Language Threshold Hypothesis). The **Language Threshold** Hypothesis argues that students must have a sufficient amount of L2 knowledge (i.e. vocabulary, grammar and discourse) to make effective use of skills and strategies that are part of their L1 reading comprehension abilities (Clarke, 1980). The fundamental issue for L2 reading centres on the relative importance of L2 knowledge versus L1 reading abilities. The Language Threshold Hypothesis, as proposed by researchers, states that language knowledge is more important than L1 reading abilities up to some point at which the learner has enough L2 knowledge to read reasonably fluently. Although there are a number of qualifications, this hypothesis has been strongly supported by recent L2 reading research. A number of studies have demonstrated the greater importance of L2 linguistic knowledge (than L1 reading knowledge) for students in varying contexts (Pichette, Segalowitz and Connors, 2003; Yamashita, 2002; see Bernhardt, 2011; Grabe, 2009).

**Concept 2.3 Language Threshold**

*Language Threshold:* This hypothesis states that L2 readers need to have enough L2 knowledge (vocabulary and structure) so that L1 reading strategies and skills can be used efficiently to help comprehend the L2 text. If readers are devoting most of their cognitive resources to figuring out the language of the L2 text, there are few cognitive resources left over for the fluent comprehension processes that would normally support the L1 reader. Readers usually cross the threshold whenever they encounter L2 texts in which they know almost all of the words and can process the text fluently. Because L2 readers are all different in their L2 knowledge, topic knowledge and L2 reading experiences, there is no one level of general language proficiency that counts as the threshold for all readers or for all texts. The threshold will vary depending on the reader, the text difficulty, the topic, and, in some cases, the task.

Critics of this hypothesis have argued that there is no single set of linguistic knowledge that can be defined as presenting the necessary foundation (or the threshold). However, this objection does not represent
a strong criticism because reading success varies with a number of factors. A given text may be too difficult to read because of its linguistic demands, but it also might be too hard to read fluently because of a new topic, poor organisation or insufficient time to read. The idea behind the linguistic threshold is not that there is a fixed set of language knowledge that students need. Rather, a variable amount of linguistic knowledge, combined with fluency of processing, is needed to read a specific text, on a specific topic, for a specific task. Students can be said to pass above the threshold (perhaps only temporarily for one specific text) when they have enough linguistic knowledge to read the text without great vocabulary and grammatical difficulty. As students are able to read more and more texts fluently, one can say that they are moving beyond the linguistic threshold, yet any new and difficult text might throw them back to a level of less fluent and hence inefficient reading.

One major consequence of passing through the linguistic threshold is that students free up cognitive resources, which were previously used to figure out language structures and vocabulary, to read more strategically and transfer L1 strategic reading practices to the L2 setting. This hypothesis provides a strong argument for giving students a lot of exposure to reading, focusing both on fluency and on texts that are not too difficult.

**Quote 2.7**

Despite the common-sense assumptions of the importance of language knowledge, the belief has existed for some time that if students cannot read well in their first language, they will be unable to read well in the second/foreign language….

The clear conclusion of [L1 reading versus L2 language knowledge] studies is that second-language knowledge is more important than first-language reading abilities, and that a linguistic threshold exists which must be crossed before first-language reading ability can transfer to the second-language reading context. However, it is clear that this linguistic threshold is not absolute but must vary by task: the more demanding the task, the higher the linguistic threshold.

Alderson (2000, pp. 38–9)

In all studies, L2 variables were found to have a stronger impact, overriding the variance attributable to L1 experience. Thus, although L2 print information processing is guided by insights stemming from literacy experiences in the two languages, L2 print input appears to be the dominant force in shaping reading subskills in that language.

Koda (2007, p. 29)
2.1.5 Varying language transfer influences

A natural extension of the Language Threshold Hypothesis is the larger issue of transfer, a uniquely L2 topic. An initial issue in discussing transfer, and one that is sometimes downplayed, is that transfer of L1 knowledge to L2 reading may support comprehension but it may also interfere with comprehension. A second major issue for transfer involves transfer of basic reading purposes (see Chapter 1) and (meta)cognitive knowledge, the latter including strategies, inferences, motivation, attitudes and background knowledge resources.

Transfer as interference is typically assumed to influence beginning and intermediate levels of L2 reading. When L2 students are asked to read material that is difficult for them, they rely on any resources available to try to make sense of the text (refer to the discussion of the situation model in Chapter 1). At beginning L2 levels, students’ strongest resources are their L1 language abilities, their L1 reading abilities and their knowledge of the world. At times, these resources provide enough support to carry out certain comprehension tasks; at other times, these same resources mislead students or slow L2 processing routines. In this latter situation, it is important to recognise that such interference is both natural and strategic on the part of students (and L1 resources are always active to some extent for the L2 reader). The instructional goal at lower levels is for students to develop enough vocabulary, reading practice and processing fluency in the L2 so that they rely less on L1 resources that might interfere. Of course, one of the best ways to move beyond heavy L1 interference in L2 reading is to be sure that students are not always reading texts that are too difficult for them; students should be given sufficient opportunities to read texts that are easy to read and enjoyable.

Concept 2.4  Transfer in L2 reading

Transfer refers to the idea that L2 readers will use their L1 knowledge and experiences to help them carry out L2 tasks. In the case of reading, transfer applies to a variety of language knowledge bases and cognitive abilities. Transfer can occur, for example, with phonological knowledge, morphological knowledge, topical knowledge, general background knowledge, problem-solving strategies and inferencing skills. We also tend to transfer our prior experiences to tasks of various sorts, including academic tasks that involve reading L2 texts. Sometimes transfer supports reading tasks; but sometimes it interferes with successful task completion. Transfer is also discussed more generally, in Educational Psychology, in terms of transfer of learning. Transfer in this broader context is usually seen as problematic in that skill learning in one context is difficult to transfer immediately to new contexts and situations (see Quotes 2.8 and 2.9).
A different aspect of interference is likely to persist for much longer periods and may require consistent and direct teacher intervention, even at advanced reading levels. Students may not be aware of the varying purposes for reading called upon in L2 settings, particularly in academic settings. They may still be making assumptions about the uses of reading that are appropriate to their L1 experiences but not as appropriate for some L2 reading purposes. These assumptions may also be influenced by different motivations for reading and different attitudes toward reading. To minimise these types of interference, it is important to explore goals for L2 reading, appropriate strategies for completing L2 reading tasks and inferences that connect background knowledge to text information.

Positive transfer effects, on the other hand, represent valuable resources for L2 reading development. In the right circumstances, many aspects of

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**Quote 2.8**

The literature on transfer tends to be pessimistic. [L.] Mikulecky (1990) claims that a major misconception in literacy studies is that ‘mastering literacy in one context substantially transfers to other contexts,’ and adds ‘Transfer of literacy abilities is severely limited by differences in format, social support networks, and required background information as one moves from context to context’ (p. 25).

Urquhart and Weir (1998, p. 3)

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**Quote 2.9**

One way of defining transfer is automatic activation of well-established L1 competencies ... triggered by L2 input. Thus, transfer transpires regardless of learners’ intent ... and its occurrence cannot be easily controlled ... Several assumptions underlie this view of transfer. First, for transfer to occur, the competencies in question must be well rehearsed — to the point of automaticity — in a L1. Second, transfer is not likely to cease at any given point in time during L2 development. Third, the transferred competencies will continue to mature through experience with L2 print input ... L2 reading subskills emerge through crosslinguistic interactions between transferred L1 competencies and L2 print input; the emerging subskills are gradually adjusted to the salient properties of the L2 input.

Koda (2007, pp. 17–18)
L1 reading abilities support L2 comprehension, though this transfer typically assumes well-developed literacy abilities in the student’s L1. Examples of positive transfer effects include the following: effective strategies for reading academic texts, appropriate purposes for reading, experiences with successful task completion, flexibility in monitoring comprehension and skills for analysing and learning new words. Positive transfer effects provide a means for accelerated development of L2 reading abilities when they are assisted by instruction and teacher guidance.

A very popular notion in language teaching is that skills transfer is uniformly good and an easily accessible resource for L2 students. Very little evidence actually exists for these views, and there is now much evidence that such perspectives are simplistic and, at times, counterproductive (Baddeley, Eysenck and Anderson, 2009; Schunk, 2000). Aside from numerous studies documenting interference from L1 resources, there is growing evidence – from Language Threshold research and strategy research – that skills transfer is not uniformly automatic. One important consequence is the need to explore which L1 skills and strategies might be more, or less, automatically transferred, which might be positive supports for L2 reading development and how positive skills and strategies might be reinforced through direct instruction in, for example, word recognition skills, vocabulary-learning strategies, cognate use and comprehension strategies.

### 2.1.6 Interacting influence of working with two languages

Closely related to transfer discussions is the very fact that two languages are involved in L2 comprehension processes. The inevitable interplay between two languages in L2 reading influences word recognition, reading rate, the organisation of the lexicon, the speed of syntactic processing, strategies for comprehension, experiences in task performance, expectations of success and failure, motivations for reading and a number of other possible points of interaction (Cook and Bassetti, 2005; Koda, 2007, 2008; Scott and de la Fuente, 2008). This interplay is seldom discussed, perhaps because there is relatively little research that focuses specifically on this point. However, this issue may become more important as more research is reported on cognitive processing in bilingual individuals and as research in discourse comprehension increases in the field of psychology. Instructional implications drawn from this perspective suggest greater use of the L1 in L2 classrooms, particularly when students work together on more complex comprehension tasks. The issue of two languages working at the same time also reveals a range of non-linguistic factors that distinguish L1 and L2 reading comprehension. These factors are discussed in the next section of the chapter.
In addition to the six linguistic and processing differences noted above, further distinctions exist between L1 and L2 reading. A number of these differences centre around other resources and experiences that influence L2 reading comprehension, including students’ proficiency levels in L1 literacy skills, their prior L2 reading experiences, their differing personal experiences with and motivations for L1 and L2 reading, their attitudes toward authentic texts and their training in the use of various supporting resources (see Table 2.2). Each of these differences will be discussed, in turn, in the following sections.

2.2.1 Differing levels of L1 reading abilities

An important L1–L2 difference is that L2 readers are influenced by their levels of L1 reading abilities. In one respect, this point could have been
made in earlier discussions of transfer; students who have limited L1 literacy abilities cannot be expected to transfer many supporting resources to their developing L2 reading. The types of abilities that students use in their L1 reading represent the upper limit of what can be expected for linguistic transfer, strategic practices, problem-solving abilities, task-completion skills and metacognitive awareness of reading processes; these are all skills and resources that can influence L2 reading, but only if they are already developed as L1 reading abilities. All too often, teachers and researchers do not examine the L1 reading skills of their students. Without such knowledge, we are more limited in deciding what skills and strategies to focus on and promote for transfer.

2.2.2 Differing motivations for reading in the L2

When comparing L1 and L2 reading contexts, it is likely that we will find different individual motivations for reading, as well as differing senses of self-esteem, interest, involvement with reading and emotional responses to reading. As students progress through different levels of education, and as academic-task demands increase, L2 students tend to have differing (and perhaps more conflicting) combinations of motivations for reading L2 texts. Some of these differences in motivation are based on varying academic goals, socialisation practices from home and community, prior educational instruction or broad cultural frameworks for literacy uses. These possible differences should be explored in classroom settings (e.g. through discussions, student-interest surveys, simple surveys of parents and community members, parent–teacher conferences and family literacy projects). This information may help us understand student strengths and weaknesses beyond any language assessment measure and may lead to more effective instruction (see Dörnyei and Ushida, 2010; Rueda, Velasco and Lim, 2008).

Aside from specific motivations for reading and task performance, students bring with them varying underlying attitudes toward L2 reading, which are often linked to perspectives on past educational experiences in both L1 and L2 contexts and to socio-political differences between L1 and L2 societies. These experiences shape perceptions of how well L2 readers can perform tasks, and lead to student self-perceptions of how successful they are as students (and readers). These perceptions, in turn, influence students’ self-esteem, emotional responses to reading, interest in reading and willingness to persist. No one disputes the fact that students’ self-perceptions, emotional attitudes toward reading, interest in specific topics, and willingness to read texts and learn from them are important issues for the classroom learning environment. Unfortunately, these issues are often ignored in discussions of reading comprehension instruction, but in L1 reading research they are now seen as important predictors of academic success (Guthrie, 2008; Guthrie, Wigfield and Perencevich, 2004; Schunk
and Zimmerman, 2006). L2 teachers are not likely to be given much guidance on these issues (cf. Grabe, 2009), so reading motivation and its various manifestations represent an important topic for teacher research and classroom exploration (see model action research projects 7.3.1, 7.3.2, 7.3.3 in Chapter 7).

2.2.3 Differing amounts of exposure to L2 reading

A major difference for L2 reading, and one that strongly influences the linguistic knowledge differences mentioned in 2.1, is the total amount of exposure to L2 reading and to L2 print that a student experiences. In many cases, the extent of reading practice in the L2 will mark the typical L2 reader as different from the L1 reader. As we emphasised in Chapter 1, the development of fluency and automaticity in word and syntactic processing is an essential foundation for reading. Most L2 readers are simply not exposed to enough L2 print (through reading) to build fluent L2 processing (Koda, 2005; Lundberg, 1999). Nor do they have enough exposure to build a large recognition vocabulary. These differences between L1 and L2 reading situations are significant because L1 readers spend years building up the amount of exposure to print needed to develop fluency and automaticity. The extent of students’ exposure to L2 print is an issue that we can (and should) explore with our students to understand better just how much L2 reading practice students have had, and what types of reading practice and L2 texts they have been exposed to.

2.2.4 Differing kinds of texts in L2 contexts

The experiences that individual students have with differing kinds of texts in L1 and L2 contexts are additional potential sources of reading comprehension differences. Because L1 and L2 readers are likely to have different experiences with various text genres, they develop diverse approaches to the range of texts that they encounter. In many L2 contexts, students read quite simple texts, yet in other L2 contexts, students read texts far more difficult than they should be encountering. In the cases of the simpler texts (as in certain L2 reading textbooks and graded readers), these reading experiences may not match the reading experiences of L1 readers at comparable cognitive-ability levels. In settings where L2 students are asked to read difficult, often authentic, texts, reading experiences at first glance appear to be similar to L1 students, but closer examination reveals that the texts are often much shorter in length, a recognition on the part of materials developers of the difficulties students are likely to have with authentic texts. L2 students, over a period of time, are also less likely to be exposed to the full range of text genres that are commonly
read by L1 students, partly because a number of these genres are read outside of class or even outside of educational task requirements. It is not obvious what impact these differences have on L2 students, except that the range of texts that they could be reading is generally restricted (and new vocabulary exposure may be more limited as a result; cf. Gardner, 2004).

2.2.5 Differing language resources for L2 readers

Important L1–L2 differences centre on the use of bilingual dictionaries, glosses, translation and cultural background resources in L2 contexts, but not in L1 contexts. Bilingual dictionaries are, by definition, unique to L2 reading. L2 students often use learner dictionaries that carefully attend to the ways in which words are defined. Neither of these resources is typical of L1 literacy learning. L2 students often read materials with glosses for more difficult terms. It is true that glosses are also found in L1 textbooks (e.g. in science-learning textbooks that often require extensive technical vocabulary development), but they most often assist readers with unusual vocabulary, technical terms or archaic words. In L2 contexts, glosses commonly provide synonyms for vocabulary that is above learners’ levels but well within the range of vocabulary knowledge expected of L1 readers. In addition, L2 students commonly write out translations of texts and do their own mental translations as ways to assist comprehension (Kern, 1994). Such translation resources are unique to L2 settings. Finally, L2 students can reference their own specific L1 cultural knowledge and text resources for L2 reading tasks (e.g. proverbs, special and sacred texts, and cultural narratives). How these resources influence L2 reading comprehension for different groups of readers is not well known, but they indicate a clear difference between L1 and L2 readers, and they should be investigated in the classroom for insights that a teacher might gain (see Hartmann, 2001; Scott and de la Fuente, 2008).

Pointing out unique and distinct resources for L2 students is only part of the issue. We need to evaluate the effectiveness of these resources, and students need to be taught to use these resources efficiently. For example, effective teachers do not take an absolute stand on bilingual dictionary use because students are likely to use bilingual dictionaries no matter what is said. Rather, the issue becomes which bilingual dictionaries to use, when to use them and how to use them effectively. If we ‘ban’ bilingual dictionaries, we only guarantee that students will not receive the guidance needed to use them efficiently – because we can be sure that students will use them on their own. (See model action research projects 7.1.1, on the use of dictionaries, and 7.1.2, on the effectiveness of glosses, in Chapter 7.)
2.3 Socio-cultural and institutional differences influencing L1 and L2 reading development

Aside from specific individual differences, linguistic and otherwise, a number of larger cultural and social issues operate outside of the specific classroom context (see Table 2.3). Reading development and reading instruction are strongly influenced by parental and community attitudes toward reading and uses of literacy. This is true for both L1 and L2 contexts, but, as will become apparent in the sections that follow, these factors do not always operate in the same way, either between L1 and L2 contexts, or across various L2 contexts.

2.3.1 Differing socio-cultural backgrounds of L2 readers

A key difference between L1 and L2 reading settings, but one often overlooked, relates to the L1 socialisation to literacy practices that L2 students bring from their L1 cultural backgrounds. In some cultures, literacy is relatively uncommon, and written communication often involves scribes and letter writers. Other cultures use literacy extensively, but emphasise certain uses over others, often placing greater value on sacred texts or other highly valued traditional texts. Yet other societies use literacy extensively, despite the fact that individual limitations in literacy skills are common and socially accepted. Finally, societies like the US, the UK and Australia socialise citizens to believe that everyone should be literate. In such settings, the literacy environment is intense and pervasive (i.e. signage, labels and texts of all types are found everywhere).

In each cultural context, assumptions about how to use text resources, including technology resources, also tend to differ (Garton and Pratt, 2009; Wagner, 2009). Some social groups see texts as unchanging; others consider texts as serving utilitarian purposes but not to be highly valued; others view texts as sources of truth to be studied; yet others value texts as alternative interpretations of realities and facts that can be disputed.

Table 2.3 Socio-cultural and institutional differences influencing L1 and L2 reading development

| 1. Differing socio-cultural backgrounds of L2 readers |
| 2. Differing ways of organising discourse and texts |
| 3. Differing expectations of L2 educational institutions |
In each setting, individuals are socialised in their L1 education to engage with texts in specified ways (Haeri, 2009; Lundberg, 1999). L2 readers moving from one orientation to another are likely to encounter some difficulties in reading texts for purposes that do not complement cultural assumptions; these students may need teacher assistance in making these shifts. In almost all cases, L2 students will have some difficulties framing assumptions presented in L2 texts when these texts make use of cultural assumptions that the L2 students do not share. These mismatches in assumptions may cause serious problems especially when L2 students read literary and contemporary-culture texts.

2.3.2 Differing ways of organising discourse and texts

Another major distinction between L1 and L2 reading contexts is the differing cultural and social preferences given to particular ways of organising discourse and texts. In literate societies around the world, people develop preferred ways of organising information in written texts (and also in oral texts for that matter). For example, people make arguments in writing by presenting observational and numerical evidence, by emphasising a culturally accepted logic, by pointing to a persuasive example or by referring to traditional wisdom or religious doctrines. Certain sociocultural preferences for making an argument or taking a position then tend to become conventionalised in writing so that the structures and organisational plans for writing tend to reflect an expected way to write an argument. Thus, purposes for writing, beliefs about the preferred way to make an argument and the ways in which information is used in writing all influence how texts may be organised and how linguistic resources are employed. The study of this phenomenon is sometimes referred to as contrastive rhetoric or intercultural rhetoric (Connor, Nagelhout and Rożycyk, 2008; Hudson, 2007; Kaplan, 2005). The essential point for the purposes of reading is that L2 text resources may not always be organised in ways that match students’ L1 reading experiences.

Quote 2.11

What it means to be literate, how this literacy is valued, used and displayed, will vary from culture to culture. Some cultures have enormous respect for the printed word, such that it is implicitly accepted as authority, and cannot be questioned. Others fear the implications of putting any opinions in print, since the greater permanence accorded to opinions thereby makes the owner of the opinion more ‘accountable’.

Alderson (2000, p. 25)
Additional factors related to text organisation that may influence L2 reading comprehension include differences in (a) the ways in which texts express interpersonal relations with the reader (e.g. the use of ‘I’ and ‘you’ as pronouns), (b) expectations about the amount of new information that is embedded in a text (e.g. the use of many nominalisations), and (c) assumptions about how explicitly reader interpretation should be guided (e.g. with supporting details, descriptions and explanations). These issues suggest the benefits of exploring the discourse organisation of texts as part of instruction and raising student awareness of the ways in which information is presented (or not presented), all the while being cautious with certain over-generalised claims about discourse differences across languages. (See model action research projects 8.2.1, focusing on the use of graphic organisers, and 8.2.3, focusing on the identification of signal words indicating sequence and contrast, in Chapter 8.)

2.3.3 Differing expectations of L2 educational institutions

Our last distinction between L1 and L2 reading is shaped by the different attitudes, resources and expectations of L1 and L2 educational structures. L2 students are shaped in their assumptions and their performances by their previous L1 institutional experiences (with, for example, national exams, national curricula, teacher behaviour, classroom management, teacher inspectors and district and regional mandates), which could be in sharp contrast with the L2 institutional settings in which they find themselves (Hanley, Tzeng and Huang, 1999; Leki, 1992; Lundberg, 1999). Additional differences include amounts of funding for teacher training, levels of teacher experience, allocations of money to educational resources, level of support for educational infrastructure, teacher–student relationships and class sizes. Of course, these differences can be found within L1 contexts, with ethnic minority groups often experiencing lower levels of institutional support. However, these differences may be magnified considerably with L2 students from many different socio-cultural and language backgrounds, and these differences can lead to reading difficulties that might otherwise be unexpected (Fairbanks, Cooper, Masterson and Webb, 2009; Rueda, Velasco and Lim, 2008).

In line with this issue are the differences that stem from group socialisation to the usefulness (or non-usefulness) of institutional structures generally and, on many occasions, the potential oppressiveness of these institutional structures more specifically. In L1 contexts, ethnic minorities often see school institutions as representing interests at odds with their own, and they tend to develop resistant attitudes toward educational efforts (Ogbu and Simmons, 1998). In L2 contexts, students may bring strong attitudes from the L1 to the L2, with little room to accept the L2 as a relatively utilitarian tool for further learning. At the same time, many
L2 students do adopt a strongly utilitarian attitude toward the L2, an attitude that may be quite different from their attitudes toward their L1s. A utilitarian attitude may, in turn, limit students’ willingness to engage in a long-term consistent effort to learn to read fluently.

2.4 Conclusion

The many differences that exist between L1 and L2 reading contexts point out the complexities of L2 reading comprehension (see Table 2.4 for a summary of differences). Not only are L2 students and student groups as diverse as L1 student groups, but they are involved in learning goals that are even more complicated than those in most L1 literacy environments. Many of the assumptions associated with L1 reading instruction should be rethought and modified in light of these differences. On the basis of this chapter, it should also be apparent that there is no straightforward blueprint for how a teacher should adapt instruction for all L2 contexts. It is also clear that no one-size-fits-all approach or set of procedures can be offered.

Table 2.4 Differences between L1 and L2 reading

<table>
<thead>
<tr>
<th>Linguistic and processing differences</th>
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<tbody>
<tr>
<td>1. Differing amounts of lexical, grammatical and discourse knowledge at initial stages of L1 and L2 reading</td>
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<tr>
<td>2. Greater metalinguistic and metacognitive awareness in L2 settings</td>
</tr>
<tr>
<td>3. Varying linguistic differences across any two languages</td>
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<tr>
<td>4. Varying L2 proficiencies as a foundation for L2 reading</td>
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<tr>
<td>5. Varying language transfer influences</td>
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<td>6. Interacting influence of working with two languages</td>
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<tr>
<th>Individual and experiential differences</th>
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<tr>
<td>7. Differing levels of L1 reading abilities</td>
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<tr>
<td>8. Differing motivations for reading in the L2</td>
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<tr>
<td>9. Differing amounts of exposure to L2 reading</td>
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<tr>
<td>10. Differing kinds of texts in L2 contexts</td>
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<td>11. Differing language resources for L2 readers</td>
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<table>
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<tr>
<th>Socio-cultural and institutional differences</th>
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<tr>
<td>12. Differing socio-cultural backgrounds of L2 readers</td>
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<td>13. Differing ways of organising discourse and texts</td>
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<td>14. Differing expectations of L2 educational institutions</td>
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If there is one lesson that has emerged strongly in the past decade of research on L2 reading, it is that the L2 reader is not simply a reader in contrast with the L1 reader. Instead, current L2 research suggests that the L2 reader is one who incorporates both L1 and L2 language and literacy knowledge. Such a perspective opens up more careful explorations of L2 reading processes, the role of L1 transfer, the development and use of the bilingual lexicon, and the strengthening impact of L2 input knowledge as the L2 reader develops. This view is captured well in Quote 2.12 by Keiko Koda.

**Quote 2.12**

Dual-language involvement is the foremost attribute highlighting the unique characteristic of second-language reading. A clearer understanding of how literacy experiences in two languages interact and coalesce in the formation of second-language reading skills should take primacy in second language reading research.

Koda (2008, p. 90)

Becoming informed about the many possible differences between L1 and L2 students can assist all of us in (a) interpreting reading research and the many assertions made about effective reading instruction, (b) recognising the particular demands of L2 reading and (c) investigating pertinent concerns in our own classrooms. At the same time, we cannot wait for sweeping assertions from research, nor should we be swayed by claims of ‘perfect’ classroom solutions. Rather we should use our own classrooms, and our own students, as a forum for meaningful classroom-based research. Real classroom environments often provide the best context for exploring L2 learning issues important for effective learning. The differences showcased in this chapter represent useful starting points for meaningful and purposeful teacher-initiated enquiry, as shall be illustrated in Section IV of this volume.

But before considering how teachers can engage in their own action research, we would first like to provide an introduction to current research on reading in both L1 and L2 contexts. We begin by viewing research studies as types of stories. Just like every well-formed story, each study has a setting, a set of episodes, a culminating event, and a moral for the reader. We then tell ten good stories about L1 reading research (in Chapter 3) and ten good stories about L2 reading research (in Chapter 4). These next two chapters also allow us to introduce readers to very interesting research
efforts by some leading researchers, highlight key component features of reading comprehension, and illustrate a range of ways that good reading research is being carried out in both L1 and L2 contexts.

Further reading

Citations that appear frequently in the chapter represent key references for further details. Some additional resources, beyond those referred to in the chapter, are noted in Chapter 10 (mainly 10.1 and 10.2) and here:

• On *transfer*, see Koda and Zehler (2008), Koda and Reddy (2008)
• On *the interplay between two (or more) languages in reading*, see Cook and Bassetti (2005), Koda (2007)
• On *the use of different L2-specific resources to facilitate reading*, see Hudson (2007), Nation (2001), Prichard (2008)
• On *cultural and social issues related to reading*, see Goldenberg, Rueda and August (2006), Rueda, Velasco and Lim (2008)