

# *Chapter 1*

Introduction —  
Problems of bilingualism  
and second language literacy  
in today's globalized learning spaces

## 1.1 Four themes — From theory to practice

Around the world, one of the interesting differences from one country to another in how people think about bilingualism is how conscious (and self-conscious sometimes) they are of it. At one extreme, knowledge and use of two languages is cause for controversy and conflict. At the other extreme, the casual observer is often surprised at how similar problems, potentially controversial and conflictive in the same proportion, appear to be taken for granted. This book will examine the central research problems in bilingualism and second language (L2) learning from the point of view that they should not be taken for granted. Properly understood from the perspective of the cognitive sciences, none of these problems, ultimately, should be the source of social and political conflict either.

For investigators, our increasingly globalized societies are continuously multiplying opportunities for research, and for all of us, opportunities for greater intercultural understanding. For educators, these changes actually present interesting challenges, even though sometimes the challenges seem to be overwhelming. The rapid social and economic transformations in Asia pose some of the most interesting opportunities and challenges in recent times. To take one example, among many other important ones: the dramatic expansion of learning English as a second or foreign language (FL) in the region, not only in quantitative terms but also in regard to diversification, will soon prove to be historically unprecedented (Cheng, 2008; Evans, 2011; Rajagopalan, 2009). The learning of “English as FL” has increasingly given way to the *appropriation of English* with the emergence of new variants, the result of extensive bilingualism and cross-linguistic influence.

At the same time, we have witnessed the growing importance of learning Mandarin Chinese as L2 (in countries where it is an official or national language), and the continued importance of learning the Chinese writing system in the greater East Asia region, and a new interest in Chinese as FL or heritage language internationally (Yip and Matthews, 2010). The learning and teaching contexts vary widely, as well as in their complexity. To give just a few examples: all children in Japan learn the Chinese characters that historically have been incorporated into their writing system, and simultaneously learn the alphabetic writing system as a part of L2 learning of English, and for writing in Japanese for some purposes. First language (L1) Cantonese-speaking children in Hong Kong learn two L2s, Mandarin and English, along with their respective writing systems. A similar trilingual learning task is a challenge for many Taiwanese elementary school students. Different bilingual and biliteracy learning situations present themselves in Singapore, and all of South East Asia, Korea, in minority language speaking regions of Mainland China, and so forth (Clothey, 2005; Yu, 2008; Zhao and Liu, 2010).

As should be evident from this brief survey of language use, in the study of bilingualism it is difficult to separate out the problems of second language reading and writing, in particular when L2 literacy involves a different writing system, not just a variant of the same kind of orthography. Bilingual and L2 literacy thus present special opportunities to understand bilingualism in general, especially when the cross-writing system comparison involves design features that are maximally different.

Considering the many research problems that have presented themselves in recent years, the following chapters will be organized around four themes. The first two themes (Sections 1.1.1 and 1.1.2) examine what research has suggested about bilingual development and how bilingual ability is structured into systems and subsystems. The second two themes (Sections 1.1.3 and 1.1.4) consider how bilingualism is related to literacy, an important consideration in the teaching of second languages in school.

### 1.1.1 Imbalances in bilingual development

What is the impact of intensive second language learning on the development, and even continued viability in some cases, of minority and indigenous languages? Such is the problem that Lin and Man (2009) address from a language policy and planning perspective in their wide-ranging study of bilingual education in Southeast Asia. How can young people appropriate an international language for academic purposes, perfect their abilities in the national language, and preserve — even continue to develop — their mother tongue/primary language, if, for example, it's not the same as the national language? Closely related to the problem of competing language learning demands is that of first language attrition and imbalanced bilingualism in situations of both second language learning and simultaneous bilingual development. This might appear to be an unusual way to begin a discussion of dual-language development. But, to fully understand bilingualism it is important to not only study cases of balanced proficiency, where the two language systems have attained an equilibrium in use and competence. To be sure, the equal distribution of linguistic knowledge and ability is often viewed as an ideal standard against which bilingual proficiency of the unequal kind is compared. However, a moment's reflection reminds us that it is imbalanced bilingualism, worldwide (especially considering all cases of second language learning), that is the most typical, probably among both children and adults. Such a view of knowledge and ability assumes that some components are “specialized” to some degree and others are “shared,” the latter sometimes called “cognitive-general.” This idea leads us to the second theme.

### 1.1.2 Systems and subsystems

How is competence and ability in two languages structured mentally? Relevant to this issue is whether or not the two linguistic subsystems (parts of a larger language system) are represented separately. Then, are there domains of knowledge that are shared in common (not specialized or bound to either linguistic subsystem)? What are the other components of bilingual proficiency, and what is the nature of the interaction among them? Or alternatively, might the idea of a componential mental architecture for bilingualism (and by extension, for monolingualism) be incorrect? Should we instead conceive of language abilities as internally homogeneous and holistic?

### 1.1.3 Cross-language and cross-writing system literacy

Of the many research problems in bilingualism and second language learning is bilingual literacy or literacy in a second language — it's one of the most important for educators. Here, the most interesting questions are related to comparisons between L1 literacy and L2 literacy when the writing systems contrast to some degree. The sharpest contrast involves alphabetic writing and morphosyllabic Chinese writing. For example, in what way are reading skills deployed differently in alphabetic and morphosyllabic systems? What might be some of the universal underpinnings of written language processing and literacy learning, common to all orthographic systems, acquired in all literate cultures? From this point of view, the sharpest contrast is the most interesting.

### 1.1.4 Language and literacy teaching

What are the most effective and efficient approaches to Second Language Acquisition (SLA)? Similar to pedagogical issues in literacy learning, an important controversy has persisted in the field of second language teaching, opposing what are sometimes called *natural approach methods* on the one hand and so-called *instructed SLA* on the other. What is the role of grammar learning, different kinds of focus on form in SLA, and metalinguistic awareness? Readers will notice that this debate is parallel to a similar one in literacy teaching, opposing whole-language and direct instruction approaches.

## 1.2 Looking ahead to the upcoming chapters

Chapter 2 begins our discussion of the first theme, a consideration of the two possibilities in bilingual development: the early balanced and the imbalanced kinds. Contrary to popular conception, the imbalanced kind can be either sequential (a L2 that begins to develop after L1) or simultaneous (two languages that develop together from birth). As we will see, studying how the language subsystems of bilinguals can develop unevenly not only helps us understand why one language comes to be stronger and the other weaker, but also opens a window onto the inner workings of the Faculty of Language. The idea here is that what we call “language” is internally diverse; bilingualism adds another dimension of diversity.

The unique insights of the study of (typically) imbalanced bilingualism lead us to consider, in Chapter 3, cases of imbalance that are extreme, or exceptional, in some way. This survey of the research picks up on the discussion of the second theme of the book — the mental architecture of bilingualism. Interestingly, asymmetries (typical, atypical and extreme) reveal more clearly the internal structure of complex abilities and faculties. The

difficult question then is — in what way can these abilities and faculties be considered to be componential? The difficulty resides in the stubborn fact that all the evidence so far that might help us sort out the different hypotheses among researchers is indirect — it will be so for some time to come.

Chapter 4 considers one field of study where the different proposals regarding the componential structure of language abilities might be tested — reading in different languages and different writing systems. Reading ability is complex and multifaceted, and should therefore lend itself ideally to considering the idea of interacting cognitive components. The relevant concept, introduced in Chapters 2 and 3, which has punctuated a number of important ongoing debates in the cognitive sciences is *modularity*. The field of literacy studies is only one example among many where this discussion is important. This notion, in fact, is the overarching conception that will tie together the four themes of the book. Understanding the components of reading ability takes us to the third theme of the book. Taking literacy as a good example of a complex ability, some of the points of controversy might be pertinent to the study of other cognitive networks and what researchers sometimes call faculties “in the broad sense.” For example, hypothetically, the Faculty of Language (broad), contains a subcomponent that we could think of as the Faculty of Language (narrow). For an introduction to the debate, see Fitch *et al.* (2005), Kinsella and Marcus (2009), Pinker and Jackendoff (2005).

Beginning in Chapter 5, attention is shifted more toward applied research problems, of concern mainly to educators, following up on the topic of the previous chapter on bilingual literacy learning. Together with Chapters 6 and 7, this section of the book will round out the discussion of theme #4 — effective and efficient approaches to second language teaching, which now in the 21st century almost always include teaching of L2 literacy. In school, the core objectives of this kind of program also include *advanced* L2 literacy, for higher-order academic purposes. Recall from the above-mentioned examples of trilingual learning that the tasks language learners face have become more complex over the years. For example, in the case of minority language speakers in Mainland China, Hong Kong, Macau, and Taiwan, two second languages, the national language (NL) and an international language, are now both subject and medium of instruction in the elementary school curriculum. Learning space and opportunity need to be optimal for all students; otherwise, advanced literacy in the NL and English (the now required international language) will continue to be only within reach of a select elite. If literacy development in children's mother tongue/first language (MT/L1) is a viable option, this goal would become even more remote under less than optimal instructional conditions. In bilingual and second language teaching, crucially, optimal implies the implementation of the most effective and terminally efficient methods; this is the underlying main idea of theme #4. Parenthetically, the same three-tiered language-learning panorama presented above, born of the new globalization of the late 20th century and current millennium, is not peculiar to East Asia; see discussion in Mohanty *et al.* (2010) and Seidel and Moritz (2009). Most immediately and forcefully, it is presented to the new generations in the African countries, the Indian sub-continent, and parts of Latin America and Europe.

Chapter 5 follows up on the topic of literacy from the previous chapter, now zeroing

in on an aspect of bilingual writing ability, and likewise ends with a proposal for future comparative writing system research — a comparison between alphabetic and non-alphabetic writing in how learners focus attention on language and orthographic forms. The central concept here will be the role of negative evidence in language learning, specifically in this case on the development of writing ability (corrective feedback, for example, is a kind of negative evidence). A clear example of focus on form that involves negative evidence is that of self-correction by beginning writers. In fact, as will be shown in the report of a current bilingual literacy project, studying self-correction in two languages turns out to be highly productive from a methodological point of view. Parallel to the questions that we asked in the previous chapter, here we ask: how might focus on form strategies differ between Chinese and an alphabetic script that is also highly regular (sometimes called “transparent” or “shallow”), such as Spanish? On the other hand, what basic processing universals might support self-correction strategies that provide learners with usable negative evidence?

A wider lens on negative evidence, and on positive evidence now, is set in Chapter 6 where we ask about corrective feedback in SLA in general. A number of interesting and difficult questions come up regarding the effectiveness of corrective feedback, problems that are not easily sorted out by “proponents” and “opponents” in the on-going debate. It also happens that recent advances in e-learning, specifically in Computer Assisted Language Learning (CALL), are casting old controversies into a new light on the question of how positive and negative evidence can be harnessed by learners. In particular, research in an area that was touched upon in Chapter 3, language learning exceptionality, has suggested an application of CALL to a very difficult problem — the convergence of critical learning resources when they are severely scarce, concentrating them when learners do not have access to adequate instruction or to reliable sources of language input.

Chapter 7 gathers the different threads of discussion together in a review of a currently popular instructional model in bilingual and second language education — *immersion*. It begins by clearing up an especially unfortunate misunderstanding. Defined, as it properly should be, as content-based L2 teaching, immersion methods are equally applicable to both bilingual education and second language programs (that are not bilingual in the sense that learners do not receive systematic instruction in their L1). Examining two contrasting models of immersion will bring back into the spotlight the concepts that were covered in the previous chapters — positive and negative evidence in SLA (e.g., in contrast to L1 acquisition), the role of deliberate learning strategies and metalinguistic awareness, and the componential nature of language ability.

Chapter 8 will review a selection of recent studies that students of bilingualism should take up, preferably to be read before beginning this book. It begins with a logical starting point — the brain (where knowledge of two languages resides), in a survey of the neurolinguistics of bilingualism (Paradis, 2004). From this narrow (in the positive sense) starting point, I recommend a broad introduction to the field that uniquely combines psycholinguistic and sociolinguistic perspectives (Myers-Scotton, 2006). The following studies return to the important topic of imbalanced bilingualism in childhood, one that for many years has been badly neglected (Yip and Matthews, 2007; Montrul, 2008). The

research on bilingual first language acquisition (De Houwer, 2009) takes a step back from the particular examples of bilingual asymmetry and provides a broader perspective. Again, it's surprising what all the possibilities actually are when children are exposed to two languages from birth. *Bilingual development and literacy learning: International and East Asian perspectives* (this book) is a sequel to my recent study of child bilingualism (Francis, 2012) that takes the circumstance of minority and indigenous language bilingualism as a conceptual framework. It introduces and defines the basic concepts; and as such it might be useful to consult for background.

The concluding chapter will revisit and summarize the themes of this book and contrast them to a different perspective on second language learning and bilingual development. In a series of papers given some years ago by Stephen Krashen (2003), known as the *Taipei lectures*, he outlined a theory that calls into question much of the recent research in the field. Thus, a critical review of this debate should help readers better understand the issues at hand.

The reader will notice that the review of the research on bilingualism in the upcoming chapters also argues for a point of view. An example was just given. The arguments and claims that will be proposed for discussion coalesce around the four themes presented above, and come together in the end. At the same time, throughout the discussions of research, it should be kept in mind that the arguments and claims should be taken as proposals, because the emerging evidence in all four areas of investigation is still only pointing us toward interesting hypotheses, some with more initial support than others. As the final and conclusive proofs are not yet around the corner, the point of view presented for consideration should be understood as a modest contribution to the task of formulating workable hypotheses that can be compared side by side. Testing them will build upon the impressive advances in this line of work that have already been made.

### **1.3 The concept of diglossia (or triglossia) <sup>[1]</sup> applied to language learning**

Returning to the theme of trilingual language education policy, multiethnic China, and more broadly East Asia, presents the same panorama that many countries face whose national language (NL) is not a widely spoken international language. It indeed seems contradictory to make such an assertion about a language with so many speakers. In any case, it is important to emphasize that this three-tiered language learning condition is not exclusive to developing countries. As was mentioned earlier, in many countries of Europe, for example, such a three-language panorama is one that language learners must consider, depending on the specific domain of language use for academic purposes in each case. But, the Asian examples are especially illustrative, given the degree of diversity (among languages and dialects) and scale, in purely quantitative terms, that is involved. Just to take one example, the number of intermediate and advanced English language learners

in China and India alone, will probably soon surpass, if it hasn't already, the number of native speakers of English world wide.

A simple and straightforward three-way hierarchy frames the learning problem that in one way or another students, educators, and policy makers converge upon to a greater or lesser degree (see Figure 1.1). Language learning needs follow from the different purposes and functions that each language serves. Language learning curriculum and allocation of language learning resources should respond to these needs, purposes and functions, all this related to the concept of diglossia that we can now expand to triglossia.

**Figure 1.1**  
**Access to information: A triglossic hierarchy**



For young people whose mother tongue/primary language is at the same time a language of international communication (LIC) and the national language of their country, by and large, learning a second or foreign language represents an enrichment option. For the great majority enrolled in secondary and college level FL programs, typically of widely varying rigor and intensity, the stakes are relatively low on average, relative, that is, to the following two cases.

Proficient speakers of (and fully literate in) the national language, e.g., Mandarin Chinese, in Mainland China or Taiwan, are presented with a different set of options. If it is also their MT/L1, learning a foreign, *non-LIC*, language is an enrichment, similar to the way it is in the first case. Mastery of a minority or indigenous language (IL) of their country would also be enriching. Such mastery could be highly enriching and motivating in regions where a non-NL or non-official language is the most widely spoken, maybe even by an absolute majority. For example, in a given autonomous region or province the primary MT/L1 of the majority of speakers may not be the national language (e.g., Tibet, Taiwan, Xinjiang Autonomous Region). At the same time, a growing segment of the population is bilingual, having learned the NL as a second language (as would typically be the case for all young people who have attended school). Among these young people, many now speak the NL as their stronger, now primary, language, and have lost proficiency in their IL (what previously was their primary MT/L1) — this is the topic of the next chapter. For them, relearning the IL is an enrichment that can be highly motivating.

But for tertiary level studies, if neither the IL nor the NL cannot completely serve the

functions of international language of science and academic exchange, the mastery of a LIC is no longer simply an enrichment, but a requirement. On average, the stakes are much higher than in the first scenario (FL learning when MT/L1 coincides with the NL and a LIC); see Lin and Morrison (2010) for a discussion of one aspect of this issue — access to academic vocabulary tied to the demands of higher education. There are, of course, some important exceptions to this requirement, in the arts and humanities, for example. Note also that tertiary level education is only the most typical example of this information access problem; some level of proficiency in a LIC, depending on information access circumstances, is required today in a wide range of endeavors and professions, not just for academic purposes.

The same set of requirements and enrichment opportunities must apply to speakers of minority and indigenous languages, for whom the stakes are now the highest. This includes the added requirement, for them, of acquisition of the basic platform of NL grammatical competence for advanced mastery of the NL for academic purposes. While today, when fewer and fewer communities remain isolated from their respective national culture, many bilingual students are fully proficient in the NL, for all practical purposes, from an early age. But for IL speakers who are beginner learners of the NL as a L2, they have the greatest interest in the most productive trilingual learning environment. For them, the IL represents an important resource, a linguistic/cognitive support system, for the development of higher-order language abilities and for effective L2 learning of the NL (Adamson and Feng, 2009; Wan and Zhang, 2007). In communities where IL preservation is still viable and remains among the historical and cultural commitments of the IL-speaking population, the language is much more than a learning resource. The goal of language teaching, then, should be an “additive trilingualism,” as Lai (2011) aptly projects. Consider the contrasting circumstances of:

- deeply rooted minority languages with millions of speakers (Beaser, 2006; Groves, 2010) versus
- weaker and endangered languages (Adamson and Feng, 2009; Chen, 2010; Zuo, 2007).

The problems of language preservation in situations of significant asymmetry and progressive displacement by a majority language are complex and difficult. Understanding how these tendencies of IL erosion are related to NL expansion (even when the IL is numerically “majority” within a region or province) involves the study of how language subsystems interact in development, especially bilingual child development. This is the topic of the next chapter on balanced and imbalanced bilingualism.

Among the 55 officially recognized minority ethnic groups (approximately 104.5 million, 8.4% of the population) many more minority languages are included among them, spoken by about 6% of the Chinese people (Zuo, 2007). Complicating matters greatly, however, is the recognition of speech communities as speaking a “language” or a “dialect” (of a language), as among the varieties of what could be considered as Chinese in the broader sense. They are sometimes not mutually intelligible, and on mainly linguistic criteria distant varieties would be normally considered separate languages. Sometimes

these are termed the “Sinitic languages,” e.g., Mandarin,<sup>[2]</sup> Wu (spoken in the region of Shanghai), Yue (Guangdong, Guangxi, Hong Kong, Macau), Min (Taiwan and Fujian province), and so forth. Speakers of the last three alone, together, easily number over 200 million. Thus, in many cases the designation of “dialect” or “language” is given with political or language policy considerations in mind; see, for example, the discussion in Groves (2010) on the relationship between Cantonese and Mandarin and how their status is perceived by both speakers and non-speakers.<sup>[3]</sup>

For minority language speakers, the three-tiered diglossia imposes special conditions of language learning. For these speakers, one of the critical policy questions revolves around the decision of when during children’s progress through the grades does the second language NL become a *medium of instruction*, as opposed to a *subject*. Conversely, for how long should the MT/L1 be the sole or predominant medium of instruction? The question then is posed: can the indigenous or minority language remain as a medium of instruction in some subjects, even after the bilingual L2 learners have mastered the NL? Implicit in this discussion is the (correct) assumption that introducing a second language as medium of instruction (immersion) marks a transition to the most effective set of language teaching approaches, if implemented correctly. On the other hand, in a well-designed bilingual instructional program, the L2 can be the medium of instruction in some subjects from the very beginning — on this view, there is no “transition” from one method to another. Lastly, it is important to emphasize that immersion does not imply in any way that the L2 must be the sole medium of instruction. In well-designed bilingual instructional models, immersion methods are applied to the second language component of the program.

Crucially, the debate on medium of instruction and bilingual instruction happens to coincide with the observation of growing tendencies of language shift toward Mandarin among young people. Language shift results in the loss of the minority language by an entire generation of speakers. The dilemma, very often, is viewed by minority language speakers as a difficult choice:

- earlier and more robust immersion in the NL, in the way it is often implemented, can result in weakening even more the minority language, while
- postponing NL immersion later and later into the upper grades leaves students unprepared for the demands of academic literacy in secondary school, demands that must be complied with in the NL.

Equal access to English for academic purposes for minority language speaking students looms in the background in all these debates. The interesting problem of selecting an orthographic system for each language intervenes as a parallel dimension of controversy. Both the NL and the LIC are represented by writing systems that are completely standardized, in the case of the former, the establishment of Modern Standard Written Chinese, based on Putonghua/Mandarin. With few exceptions, no consistent access to advanced content knowledge in the academic disciplines is possible without mastery of one of these writing systems. That is, as students progress through the grades they need more and more access to texts written in these languages of wider communication. On

the other hand, preservation of a minority language in the medium and long term, in the modern day, seems to depend on the adoption of a writing system (an alphabet, syllabary, or a morphosyllabic character orthography) and standardization along similar lines. Minority peoples who strive to preserve and consolidate their autonomy have an interest in promoting IL-medium instruction in some reasonable proportion, developing a standardized IL writing system, and establishing realms of authentic literacy use (even in the extreme case, for archival purposes, of a moribund language). The nation, by all accounts, can share these same objectives for the purpose of achieving stability through a recognition of diversity and greater democracy in language choice. This, by the way, is the official stated policy of the Peoples Republic of China. The most immediate language choice is that of ensuring the most favorable conditions for early linguistic and academic development of school-age children who do not yet speak or understand the NL (Adamson and Feng, 2009; Klöter, 2004; Wan and Zhang, 2007; Zuo, 2007). The proposal in this book is that the most favorable conditions for academic language development of L2 learners imply the inclusion, to some degree, of their L1 in the curriculum.

A different perspective on bilingual education in China, and presumably by extension, in other countries of the greater East Asian region, is the strong opposition expressed by Hu (2008) to the emerging language teaching policy that emphasizes English as the most important of the languages of international communication. According to this view, the promotion of this policy within the educational system is fundamentally akin to “acting as an accomplice to linguistic imperialism.” As if English proficiency has become “one of the most defining characteristics of talent in contemporary society” it is now in the service of elites, fueling the “tendency to devalue Chinese as a language of development and modernization” and even a “weakening identification with the heritage of Chinese culture” (p. 220). The critique goes further by questioning the rationale of bilingual education models internationally and casting doubt on findings of research that have pointed to beneficial learning outcomes of different variants of dual-language instruction. One bilingual model in particular is singled out for negative assessment (in part because it has been considered for widespread application in Chinese elementary school level foreign language programs): content-based second language teaching, or bilingual immersion, based on the example of French immersion in Canada. This particular aspect of the critique we will consider in Chapter 7.

Many readers may find somewhat puzzling the prediction that English FL/bilingual education might result in the weakening of Chinese culture and a devaluation of its language, of deeper roots by thousands of years, today in ascendancy once again. No such devalorization has been evidenced in other regions of East Asia (of Japanese in Japan, of Chinese in Taiwan, of Vietnamese in Vietnam, and so forth). In countries with a long-standing established national language, which have shifted to similarly ambitious FL learning programs, no weakening of the national language has been demonstrated. The strong European languages, in the same way, have maintained their dominant NL-status within the borders of their respective nations, unaffected by expanding bilingual instruction, similarly for Spanish and Portuguese in the Americas. That specifically advanced academic literacy in Chinese might suffer erosion (p. 213) under the influence of learning English for academic purposes is a concern that isn't supported by evidence

either, judging from similar applications of bilingual educational policy elsewhere. The possibility seems far-fetched from every plausible point of view. It should be kept in mind that the relevant comparison is not to a situation pitting an indigenous language lacking a standardized writing system and literary tradition, on the one hand, against a dominant colonial language imposed by a superior occupying power of many years, on the other. Advances in character processing technology, coupled with the continuing expansion of access to portable computing, to take just one example, in fact, point in the opposite direction. Neither the writing system nor the (national/official) language is in decline today, digitization having definitively laid to rest the idea that *pinyin*, for example, could replace morphosyllabic writing. In the United States, the nervous humor has it that “in Beijing they are learning English today so that we can learn Chinese tomorrow.”

Before picking up again on this theme in Chapter 7, we will start with theories of bilingualism as they inform a difficult research problem — explaining how language subsystems develop unevenly most of the time. Uneven development in bilingualism is the rule, even though it is often useful to think in terms of ideal conditions in which domains of linguistic competence are distributed in a balanced way. For this reason Chapter 2 starts with problems of incomplete language development and attrition of knowledge. Chapter 3 takes this a step further, where imbalances are no longer of the typical kind. Together, both kinds, each in its own way, help us better understand how the “bilingual mind” (an overused term) is structured and how it is used for actual comprehension and expression. The research summarized in these two chapters will clarify under what exceptional conditions a foreign language might actually come to displace a national language. In addition, getting a better understanding of the psycholinguistics of bilingualism will be important for work on a number of (less hypothetical) practical applications. The biggest subfield of applied linguistics is about learning and teaching applications in school. This implies language learning for the special demands of academic achievement.

Bilingualism in school, especially when second language learning is involved, includes the objectives of L2 literacy learning. For this reason Chapter 4 begins the transition from theory to practice. The remaining chapters keep the focus on applications, problems in the applied disciplines associated with language and literacy teaching. Theoreticians shouldn’t put the book down in Chapter 5, because real world classroom issues in language learning still present difficult challenges of concept and explanation. Educators shouldn’t skip the first half because it’s impossible to make sense of the debates about teaching methods and materials without thinking about plausible explanations for why language learners respond the way they do — why they are successful, when they are, and why when they are not successful.

## Notes

1. Tridiglossia is an extension of the term diglossia (see Glossary entry). Authors who have described the three tiered hierarchy of language use discussed in Chapter 1 have in mind a distribution of language functions and purposes, and how speakers perceive them, on three levels. A rough and simple example is: (1) regional or local, (2) national and (3) international. When the term “trilingualism” is used in this book, it simply refers to the interaction of three languages (e.g., in learning situations) without any necessary implication of a relationship of hierarchy or that the languages are distributed according to specific social function or communicative purpose. In that way it is a more general term. It is also used interchangeably with “bilingualism” in most contexts.
2. Mandarin, overwhelmingly, is the Chinese language with the largest number of speakers, spoken as a mother tongue by more people than any other language in the world. Modern Standard Chinese, the national language of “Greater China” (Li, 2006) is based on Mandarin (Modern Standard Chinese is known as Putonghua in Mainland China, Hong Kong and Macau, Guoyu in Taiwan); see Glossary entry for Putonghua.
3. An example of a politically biased use of the terms “language” and “dialect” would be Tse *et al.* (2007). In their study of the influence of the language that Hong Kong primary students speak at home on their Chinese reading ability, Cantonese is described as a “mere dialect” (p. 401). Children’s minority dialect or first language competence is viewed as a problem, such that the Chinese proficiency of successful readers has not been “contaminated by Cantonese” (p. 405). The way Tam (2011) explains the relationship between Putonghua and other languages and dialects (of a language) is more helpful: “[Cantonese] is a branch of the spoken Chinese language representing the culture of southern China” (p. 414). It is more precise than the formulation in Tse *et al.* (2007) in their characterization of Modern Standard Written Chinese as: “the written equivalent of Putonghua, the spoken language of the people of China” (p. 400). See Glossary entry for Putonghua.