

REVIEW

Chan Lü: CHINESE LITERACY LEARNING IN AN IMMERSION PROGRAM. Palgrave Macmillan, 2019.

This study brings together current research on cross-language literacy learning and a report from the implementation of a Chinese as second language (L2) immersion teaching program. The challenges of early L2 literacy learning, concurrent with L1 literacy learning, by child learners (K-6 biliteracy) are the guiding theme of the discussion.

Chapters 1 and 2 present a panorama of the recent expansion of Chinese language immersion programs in North America. The research on these new programs now forms an important part of the applied linguistics literature spanning many years from its ground-breaking origin in the Canadian immersion programs of the 1960s. Chapter 4 describes the curriculum of the program (one-way immersion, 50-50 model), context of the study in a major metropolitan center in California, and its evaluation procedures for the target language: a set of informal teacher-designed assessments for estimating students' progress in Chinese literacy learning. Chapters 6–8 report findings from an on-site study that applied key concepts from emerging international research, discussed in the chapters devoted to the conceptual framework.

The purpose of Chapters 3 and 5 is to provide programs with an introduction to recent advances in work on L2 and bilingual literacy and the morpho-syllabic writing system in particular. Especially useful to teachers is this part of the book for its clear and up-to-date summary of the growing scientific consensus on the interdisciplinary research problems currently in play. Here, a particularly important result from the Canadian immersion studies that comes forward is the pivotal assessment of expressive language proficiency in students' L2 (pp. 31 and 196–199). In passing, it should be mentioned that these studies, now classic, were unique in their ability to directly compare ultimate attainment of the immersion learners with that of native-speaker peers in French, utilizing standardized measures. Precisely, it was in the domain of expressive (oral and written) proficiencies where immersion learners were revealed as non-native L2 learners, this in contrast to their, by all measure, impressive attainments in academic language in the two receptive domains, demonstrating equivalent (native-like) levels of mastery. The finding that child L2 learners' mastery levels, under adequate language-rich input conditions, pattern similarly to those of adult L2 learners presents the field of language learning with profound implications, no less, regarding the discussion on competing theories of the nature of the Faculty of Language.

At the center of the conceptual framework for understanding bilingual literacy in Chapters 3 and 5 is the centrality of metalinguistic awareness (MA). Within all the categories (phonological, morphological, syntactic awareness,

etc.), MA applies to both alphabetic and morpho-syllabic systems. At the same time, the design features of Chinese writing, the case before us in this study, impose implementations that differ in the details. Reading ability, in this regard, is componential across all language-orthography correspondence systems (pp. 29–34).

A possible example of the above claim is that awareness in Chinese reading might be especially productive at the convergence of morpheme-syllable/character, while in alphabetic reading it is at the phoneme-letter nexus. On one level, the components are separable (specific or specialized). On another level, the kind of knowledge that defines MA is different from implicit linguistic knowledge, even though MA rests upon this implicit grammatical competence. The former, MA, develops with explicit learning (and typically, instruction); the latter is acquired naturally by all normally developing children without instruction. In addition, evidence suggests that the higher-order meta-level abilities are separate in the sense that they stand above the language-specific components, ‘sharable’ from within a ‘language-neutral’ general cognitive domain (pp. 34–35). This explains why in bilinguals meta-level abilities, learned during instruction in the L1, can be accessed for use in language tasks in the L2, and vice versa. The author’s review of recent studies on the development of MA in Chinese literacy learning deserves careful reading as it summarizes this important line of cross-cultural and cross-language research.

The chapter on Chinese language and orthography is especially relevant for immersion teachers because the cross-language comparison between alphabetic and morpho-syllabic represents the most distant contrast among the world’s writing systems. It begins with the important clarification that Chinese is not a single language, but a family. What in English is called Mandarin, today, corresponds to Modern Standard Chinese. If, for example, there were a similar immersion program for English-speaking children learning Minnan (閩南), spoken in Taiwan and Fujian province, the school would need the, separate, language’s own teacher and classroom. Then, for teaching reading, it is important to start by understanding why the common conception about words being monosyllabic is not correct. Beginning readers learn to parse sentences by mentally grouping morphemes into words (the contrast here with alphabetic systems, including *Pinyin*, is that characters, which represent morphemes, are written without an extra space for word boundaries). The section on Orthographic Processing summarizes the interesting research on how children come to mentally represent and compute, during reading, the constituents of phrases, words, and characters (for characters, their internal components). The greater part of this knowledge must be the result of discovering underlying regularities through self-learning.

The discussion of current work on phonological awareness is relevant because in some ways the findings, while still not finally conclusive, are surprising. The majority of characters provide a clue to pronunciation, via the phonetic, but no character subcomponent or stroke pattern represents phonemes. Why is it then that studies have shown evidence for the facilitative effect

of early *Pinyin* learning for L1 learners in China (p. 97)? Taiwanese children learn a different phonetic notation, *Zhuyin fuhao*. The author returns to this learning factor, tied to developing phonological awareness, to make a strong program recommendation for L2 learners (p. 220). A closely related finding in studies of character processing has been that in fact readers, even when reading silently, access the phonology of Chinese characters and words. Readers upon identifying the orthographic form do not by-pass the sound patterns of the language to directly select meaning. On this point, Chinese is not exceptional either: its writing system encodes spoken language (p. 101) as do all others; this implies that, in turn, none of its linguistic components gets left out in processing words on the page.

Based on a review of the research on the important role that morphological awareness, in particular, plays in Chinese literacy learning, Chapters 8 and 9 recommend methods for orienting teaching approaches toward this opportunity. While the semantic components of characters are only reliable to a limited degree, what consistency and systematicity prevails apparently provides learners, according to findings, with a resource to bootstrap the task of mapping phonology and meaning to the orthography.

For example, in the context of a natural sciences unit, a way to integrate language and content learning could be to take advantage of the productivity of compounding for naming concepts. Within the content lesson, learners attend to relevant language patterns: 嗅觉 xiù jué [olfactory], 听觉 tīng jué [auditory], 触觉 chù jué [tactile, touch+sense]. The teacher calls attention to the conceptual connection in the anatomical part of the animal, topic of the science lesson: 触角 chù jiǎo [antenna, touch+horn], making reference to a previously learned word 触 chù [touch] (p. 204). Taking the general combinatorial properties to another level, a highly productive free morpheme, for example, 心 xīn [heart], can be learned in compound words: 心理 xīnlǐ (psychology) and 粗心 cūxīn (careless). Then, in turn, the form could be examined in its presentation as the semantic component of characters 慧 zhé [wisdom], 惊 cōng [joy].

As recent work on MA has strongly suggested, reviewed in Chapters 5 and 6, phonological awareness, converging on the syllable level also plays an important role in learning (where the most consistent convergence resides, in the character-morpheme-syllable triad). While, overall, the semantic radical tends to provide greater consistency than the phonetic, the ‘phonological principle’ (Chen *et al.* 2003; Pan *et al.* 2016) makes an important independent contribution, again taking into account overall opaqueness in the system. Beginning learners must be processing what available regularities exist during the early development of orthographic awareness. The uniform end-state success of young native-speaking literacy learners, in evidence today in China and Taiwan, cannot be explained by simple brute-force rote memorization. Making literacy teaching as systematic as possible eases the learning burden even for L1 speakers; for the L2 learner of Chinese, the burden is more demanding by all accounts. This is the idea that underlies professor Lü’s proposals

in the concluding chapters. On one last programmatic recommendation, I commend her for the diplomatic tone in Chapter 10 on an urgent pending curriculum issue: reach agreement on the script—one or the other, but not both within the same cohort (p. 219)—that *non-native speaker immersion* students must work very hard to learn. The book covers other potentially interesting controversies, both applied and theoretical, that space considerations preclude me from addressing.

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