Why exposure to prosody should precede the teaching of reading

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ummins (2001) makes a distinction between Basic Interpersonal Communicative Skills (BICS), which are acquired by all speakers in their L1, and Cognitive / Academic Language Proficiency (CALP), which refers to literacy skills required for academic language proficiency. This distinction explains the discrepancy in skills of immigrant children in English speaking countries who sometimes demonstrate surface fluency in L2 English but have difficulties with academic writing. ESL teachers who are familiar with this pattern may thus be unprepared for a very different trend in Japan; many students demonstrate comprehension of complex written texts but struggle to engage in daily conversation (see Takeda, 2002). This is arguably the washback effect of an examination system, which demands a high level of reading comprehension but has no oral exam. This remarkable achievement has been at a considerable cost to the examinees, because it frequently entails many hours of homework and attendance at cram schools in order to learn through memorization rather than exposure.

Contrasting approaches to attaining English literacy are evidenced between L1 settings, and L2 settings in Japan. In L1 settings educators are urged to provide a strong base in oral language skills as a prerequisite to English literacy (e.g. Christie, 1984). In L2 settings in Japan written texts, rather than oral language skills are principally used to inform the teaching of reading comprehension. The studies reviewed below indicate the considerable benefits, which accrue if an understanding of prosody precedes the teaching of literacy. Clearly L1 acquisition of English cannot be replicated for Japanese L2 learners of English because of the different learning contexts and age of exposure to English. However at least one aspect of L1 acquisi-

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Japanese students of EFL typically demonstrate superior reading comprehension to oral skills. This is a reflection of an examination system weighted in favour of reading comprehension skills (see Garant, 2000). However attaining reading comprehension skills without an oral foundation is burdensome (Watanabe, 2002) and typically requires considerable memorization. Studies of first language acquisition indicate the formative role of prosody in developing reading comprehension. (Fox, 2010; Whalley & Hansen, 2006). Japanese EFL learners would benefit from increased exposure to prosody in order to develop reading comprehension more efficiently.

外国語として英語を学習する日本人学生 は、通常、会話力よりも読解力が優れてい る。読解力に重きを置いた入試の在り方が 反映されているからである。しかし、会話の 基礎力がない状態で、読解力を伸ばすのは、 学生の負担になり、通常、相当な丸暗記が必 要になる。第1言語と第2言語の習得に関す る研究では、読解力を伸ばす上での音素認 識と韻律の役割が指摘されている。つまり、 このふたつが読解学習の前提条件とみなさ れているのである。第1言語学習者が頻繁に 音読を聞かされるのと同じく、日本の子ども たちに、読解力をより効率的に向上させるの に役立つよう、音読を頻繁に聞かせるべき である。

tion should be adopted, that is, the principle of exposure to prosody before literacy, because of prosody's role in clarifying meaning in ways that are not evident from the written text alone.

The traditional approach: Acquiring L2 literacy through the study of written texts

English is sometimes a subject of loathing for students in Japan and there is even a special word for this: *eigogirai*. This may be because of the immense burden on the memory of having to process a large number of vocabulary and grammatical rules. Traditionally the Japanese approach to teaching EFL has focused on accuracy rather than fluency, and thus a bottom-up approach has been preferred. Explanations of vocabulary and grammar are typically presented in Japanese. The limited possibilities of positive transfer means that English grammatical rules must be explicitly and painstakingly presented. This provides learners with a heightened level of objectivity so that they frequently ask questions that L1 speakers never ask themselves. However, arguably, a largely bottom-up approach is inadequate for learning a linguistically distant language. The demands on the memory to process multiple differences on the grammatical, lexical, and phonetic level are onerous, and efficient English acquisition could be facilitated by more top-down processing, in the form of increased input (see Krashen, 2004).

Grammar is generally considered to be a skill that can be mainly accessed through written texts. The study of grammar, along with vocabulary and reading comprehension, is an essential skill, which Japanese children need to pursue in order to pass high-stakes university entrance examinations. Komiya-Samimy and Kobayashi (2004, p. 252) highlight the choice made by Japanese children to focus on English for passing exams (juken eigo) over communicative English. Similarly, Garant (2000, p. 121) describes how communicative lessons in high school may be cancelled because the teachers needed to devote the lessons to examination preparation: "Many Japanese teachers stated that focusing on communicative activities does not help students pass entrance examinations and that communicative lessons are, therefore, special." Ironically

communicative skills and the skill of passing examinations are considered to be in conflict: "The ability to communicate was seen as very important, but only if it could be accomplished without interfering with the examination process" (Garant, ibid., p. 123). Hence the approach to acquiring English proficiency is weighted toward reading comprehension rather than establishing an oral base.

This leads to the question of whether written text is processed visually or phonologically. Walter (2009, p. 5) makes a distinction between how written words in alphabetic writing are decoded and stored; decoding takes place visually but *storing* takes place phonologically: "The clear evidence here is that the visual trace disappears in favour of the phonological product." Walter outlines that information is rehearsed by "unconscious vocalization" (ibid.). These findings may explain why some L2 learners of English without adequate phoneme recognition have reading comprehension difficulties. Walter claims that L2 learners who already have good comprehension skills in their L1 do not need to be taught how to identify the main ideas in texts; the skills of how to process a text have already been established in the L1. Rather, "explicit teaching of L2 phoneme recognition will help L2 learners comprehend L2 texts better" (Walter, ibid., p. 7). Not only phoneme recognition, but also prosodic recognition appears to facilitate reading comprehension skills. Gilbert (2009) argues that L1 rhythm may interfere with the development of L2 phonemic awareness, which is necessary to connect oral skills and literacy. The skills of English reading comprehension of learners in Japan may therefore benefit from being informed by greater exposure to oral language.

Acquiring literacy through the prior exposure to prosody

A major difficulty for Japanese students is prosodic differences between English and Japanese. English pronunciation is a poor guide to English orthography: "English seems to lie at the extreme end of the consistency continuum with regard to orthography-phonology relationships" (Ziegler & Goswami, 2006, p. 434). Furthermore English and Japanese differ in the ways in which stress, pitch and intonation convey meaning. Unlike

Japanese, English is a stress-timed language and thus the use of strong or weak syllables signals changes in meaning. A largely written approach to EFL instruction ignores some of the important means of conveying meaning inherent in intonation: "Some of this intonational meaning is shown in writing, through the use of punctuation, but most of it is not." (Wells, 2006, p. 5).

The importance of nuclear stress

Jenkins (2000, p. 234) devised the well-known Lingua Franca Core, in order to promote communication between speakers of English as an International Language; the minimum features of English pronunciation are included in order to "guarantee mutual phonological intelligibility." Jenkins does not recommend the inclusion of features of L1 pronunciation, which are not crucial for intelligibility, but does include nuclear stress. Nuclear stress is essential for accurately conveying meaning in English because it fulfills a function other languages can undertake by other means; other languages may rely on word order, inflections or particles to highlight important information. Because English word order is relatively fixed nuclear stress is implemented to identify the focus of the message (Creider, cited in Jenkins, 2000, p. 46).

Jenkins (2000, p. 150) acknowledges the difficulty of teaching word stress: "word stress rules are so complex as to be unteachable", and therefore recommends that just the core features of word stress be taught. However the teaching of nuclear stress is deserving of particular attention:

Nuclear stress, whether unmarked (or on the last content word in the word group), or contrastive (somewhere else) is the most important key to the speaker's intended meaning. It highlights the most salient part of the message, indicating where the listener should pay particular attention. And contrastive stress is particularly important in English, as the language does not have the morphological or syntactic resources that many other languages have to highlight contrasts: English has few inflections, and its word order is relatively inflexible. (Jenkins, 2000, p. 153)

The reason prosody has been neglected in the teaching of EFL in Japan may be because it is only minimally featured in English orthography, and is used unconsciously by L1 speakers. Ubiquitous prosodic features such as nuclear and word stress, and the schwa do not appear in English orthography. Although every vowel may be sometimes produced as a schwa, this is not represented in the orthography. The rule that a full vowel in the first syllable is followed by a syllable with a schwa tends not to be explicitly taught. (Wade-Woolley & Wood, 2006, p. 254). Despite their infrequent treatment in textbooks, prosodic differences are one of the major obstacles confronting EFL learners in Japan, and consequently, the acquisition of English literacy. The following discussion concerns how prosody aids L1 learners of English to acquire literacy, and suggests that some of the techniques used to teach prosody also be adopted for L2 learners.

Lessons from prosody in L1 literacy instruction

Spoken and written English provide differing clues to signal the beginning and ending of words. In written English this is represented by spaces. If the EFL classroom focuses predominantly on written text, students may not learn how to separate the stream of speech into chunks of meaning. Children learning English as their L1 learn this skill thanks to the exaggerated prosody provided by their caregivers. Prosody is thus the means by which the stream of speech is made meaningful.

Prosodic cues help segment the speech stream into phrases, words and syllables, inform syntactic structure and emphasize salient information to facilitate understanding. Language users perceive speech to be made up of discrete sentences, phrases, words and even phonemes, although utterances are produced in an almost continuous speech stream. In English, the prosodic stress pattern of alternating strong and weak syllables provides a reliable and useful tool to separate words in speech, because strong syllables generally are assumed to mark the beginning of lexical words (such as nouns and verbs). (Whalley & Hansen, 2006, p. 289)

Adults are better able to impose prosody on written text than children: "prosody may play a more integral role for children when learning to read than for adults who have mastered both oral and written language" (Whalley & Hansen, 2006, p. 289-299). Hence the scaffolding of prosody provided by parents or teachers, reading aloud to children, is a means of facilitating comprehension of written text. Parents are often exhorted to read to their children in order to help them become proficient readers (e.g. Fox, 2010). The act of hearing the text read aloud provides prosodic modeling for children, that is not evident from visual processing of the text.

Accordingly, in the case of children learning to read English as their L1, studies indicate that an awareness of prosody facilitates the process of learning to become effective readers. Wood (2006, p. 284) claims, that "while stress sensitivity is part of phonology, it also contributes something distinctive to literacy development beyond this association." Ashby (2006, p. 210) argues that skilled silent readers of English rely on prosody as they read: "Skilled readers might activate multiple levels of prosodic information during silent reading, as they appear to do when processing spoken language." Although prosody is not evident from the orthography, skilled readers unconsciously superimpose their prosodic awareness on the text. "Fodor (1998) stated this idea in the implicit prosody hypothesis, which claims that readers impose a prosodic contour on text as they read it silently. Such a scenario would suggest that readers exploit pervasive linkages between spoken language and reading systems during silent reading" (Ashby, 2006, p. 319).

These explanations may be intuitively appealing to EFL teachers who notice the contrast between the way they read silently, imposing prosody on the orthography as they read, and the painstaking processes observed in some EFL learners; Harold Palmer, who was invited to Japan by the government back in 1922 to promote TEFL, considered that "reading should be as fluent or natural as speaking or hearing, not the word for word puzzling out of meaning" (Masukawa, 1978, p. 246). A comparison of reading while listening to prosody with one's inner voice, and the word for word reading sometimes observed in EFL students, suggests that the latter have been introduced to reading before they have had time to familiarize themselves with the contours of the text provided by prosody.

Regarding the teaching of reading to L1 English-speaking children, Ashby recommends:

our research suggests that skilled readers do more than activate a series of phonological segments. Readers also appear to activate a prosodic structure. Therefore, it is possible that teaching simple letter-sound correspondences is not always sufficient for skilled reading development. Developing prosodic sensitivity in young readers may prove to be an important piece of reading instruction, as our studies suggest that the ability to form elaborated, prosodic representations is a characteristic of skilled adult reading. (Ashby, 2006, p. 331)

Krashen (2004, p. 4) claims that the "effects of deliberate, direct skill-based instruction are very weak and fragile", and argues that the elements of grammar, spelling and vocabulary are "too complex to be consciously learned." This argument could be extended to include prosody. The consequences of not presenting prosody are an enormous burden on the memory to process written text without clues as to how to segment meaning. Few students are able to generalize from written texts to spoken interaction. Watanabe (2002) argues that EFL pedagogy in Japan must reinforce the association between orthography and phonology. This disassociation between these elements may explain Japanese EFL students' tendency to demonstrate strength of CALP over BICS. There would be less strain on the memory if students were encouraged to generalize from spoken language to reading comprehension. Exposure to prosody in the form of aural input, before learning to read may help students develop reading comprehension more efficiently.

L2 reading acquisition of stressed-based languages by LI speakers of syllabletimed languages

Goetry et al. (2006) conducted a study of crosslinguistic differences between children learning Dutch, a stress-based language, and French, a syllable-based language. Goerty et al. (p. 351)

speculate that native-French speaking children may have difficulties processing reading and spelling a stress-based L2 such as English or Dutch because of the demands of processing prosody, and conclude "If SPA (Stress Processing Abilities) influence reading development in stress-based languages like English and Dutch, then the inclusion of exercises aimed at developing some sensitivity to prosody and stress should be beneficial for L2 learners, especially if their L1 presents very contrasted prosodic properties and/or functions" (p. 361). Similarly, because contrasting the prosody between English and Japanese creates a difficulty, English prosody should be presented to Japanese EFL learners in order to facilitate their English reading comprehension.

How can prosody be presented to EFL

Explicit instruction to L2 learners is considered necessary because the conditions of L1 acquisition cannot be replicated for L2 learners (see Shen, 2003). However, prosody is too complex to be exclusively taught in a bottom-up manner. If modeling of prosody is provided from the early years children may be able to acquire some aspects of it effortlessly. This could be provided either by increasing children's exposure to listening to English through partial immersion, or regularly reading English stories and rhymes to children. Children's author and literacy consultant Fox (2010) highlights the importance of prosody for L1 children learning to read. Fox advises that before children learn to read they need to hear a thousand stories, to hear the same stories read repeatedly, and for parents to maintain the same intonation for each reading. Equally, children learning to read L2 English should be read to frequently in order to acquire prosody and thus a foundation for literacy.

Watanabe (2002) has proposed ways in which Japanese schoolchildren can be exposed to more spoken English in order to facilitate their general proficiency. This begins in the primary school by attuning children to listening to English, in order to later reinforce sound and letter correspondence. Watanabe criticized the tendency to present all four skills of listening, speaking, reading and writing in middle school before

children have had the opportunity to familiarize themselves with the sound of spoken English. Watanabe appeals for a greater focus on listening comprehension throughout subsequent stages of EFL education through to university. Hence exposure to prosody needs to occur not only before children are introduced to literacy, but simultaneously as they learn to read. Accordingly, students should be able to gain more extensive exposure to the prosodic features of English which are implicit in written texts, and which make written texts meaningful.

Conclusion

The suggestion that prosody be taught before literacy is not incompatible with the principles of English as an International Language; it is not suggested that prosody be taught in order for learners to conform to Anglo-American norms. Rather, prosody is critical because of the ways in which it informs literacy. Given the major prosodic differences from Japanese, in order for English to be taught effectively it should be introduced in the primary school before literacy instruction. Japanese children could learn to read more efficiently, and be spared the burden on the memory of learning a stress-timed language for which prosodic cues are unavailable orthographically. This may facilitate reading comprehension at high school, and thus relieve children of the considerable time and effort in the memorization that currently characterizes the learning style of many examinees.

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