CLD Corner: Languages Spoken in China

By: E. Tracey Gray, MA, CCC-SLP, CLD Task Force Member

The Cultural and Linguistic Diversity (CLD) Corner was created in an effort to provide information and respond to questions on cultural and linguistic diversity. Questions are answered by members of the TSHA task force on Cultural and Linguistic Diversity. Members for the 2010-2011 year include **Ellen Stubbe Kester**, PhD, CCC-SLP (co-chair); **Margarita Limon-Ordonez**, MS, CCC-SLP (co-chair); **Lynette Austin**, PhD, CCC-SLP; **M. Ruth Fernandez**, PhD, CCC-SLP; **Barbara Fernandes**, MS, CCC-SLP; **Rachel Aghara**, PhD, CCC-SLP; **Lisa Carver**, MA, CCC-SLP; **Tracey Gray**, MA, CCC-SLP; and **Sarah Panjwani**, BA. Submit your questions to ellen.kester@bilinguistics.com. Look for responses from the CLD Task Force at www.txsha.org and in the *Communicologist*.

The Cultural and Linguistically Diverse (CLD) Task Force is now offering half- and full-day trainings for school districts, Education Service Centers, university programs, and other agencies on Assessment and Intervention with CLD Populations. For information, contact Ellen Kester at ellen.kester@bilinguistics.com.

Throughout 2011, the CLD Task Force will present a series of articles in the CLD Corner that focuses on the languages many of us encounter in assessments. This fifth article in the series focuses on languages spoken in China, with a particular emphasis on Cantonese and Mandarin. Specifically, we highlight information about the historical and social contexts in which different languages were spoken as well as the phonology, script, and grammatical structure of these two languages to help understand what patterns we might see in English language learners who also speak either Cantonese or Mandarin.

Languages in China

In the country of China more than 80 different languages are spoken, with Hanyu being the most commonly spoken language (Cheng, 1991). Mandarin and Cantonese, also known as Yue, are two dialects of the Hanyu language system. Mandarin is currently ranked as the most commonly spoken language in the world and is one of the six official languages of the United Nations. In China, Mandarin is the language of the government, educational system, and media. It is spoken in the major cities of northern and southwestern China as well as in Taiwan. A 2007 Xinhua News Agency survey of more than 500,000 Chinese revealed that Mandarin is spoken by more than half of the population of China and 70% of the population aged 15-29. Cantonese is spoken primarily in the southeast region of China and particularly in Hong Kong. The languages of China, collectively known as Chinese, have a common written system but variable spoken language systems dependent upon the dialect spoken. For instance, two individuals, one who spoke Mandarin and the other Cantonese, would be able to read the same newspaper article written in standard Chinese. However, they would be unable to have a conversation about the article's topic as their spoken dialects are virtually incomprehensible to each other.

Mandarin and Cantonese are both tonal languages; the written characters are phonetically represented by both a single syllable and a tonal marker. Tonal markers are produced using intonation contours, the rise and fall of pitch, across the syllable. It is this combination of phonemes (segmental features) and intonation (suprasegmental features) that provides meaning to a syllable. If both aspects of the syllable are not produced correctly, a completely different word meaning can be stated. Individual characters can be used in either isolation or in combination to form semantic representations. The same phonological representation occurs whether the written symbol is a Chinese character or the Pinyin word. Pinyin is a transcription of Chinese characters using a Roman alphabetical system and is used to represent the word in a semi-phonological manner with markers to indicate the suprasegmental/tonal feature. For example, the word "that" is represented in standard Chinese by the character "那" in Pinyin, "náh" in Mandarin, and "nà" in Cantonese.

Phonologic and Prosodic Characteristics in Mandarin, Cantonese, and English

Mandarin and Cantonese have differing tonal systems. Mandarin has four distinct tones and one neutral tone used in sentence-ending particles. Reportedly, Cantonese has anywhere from six to nine tones with the exact number being debated by linguists (Fung & Roseberry-McKibbin, 1999). The preponderance of the literature reports six distinct tones. The following graphs indicate the different tones in each of these dialects.

Mandarin

Syllable	Tone Level	Tone Description	Word Meaning
Mā	1	high-level	mother
Má	2	rising	hemp
Mǎ	3	falling-rising	horse
Mǎ	4	falling	to scold

(Cheng, 1991)

continued on page 19

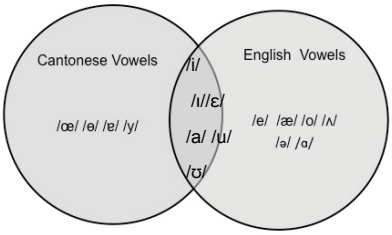
Cantonese

Syllable	Tone Level	Tone Description	Word Meaning
Fàn	1	high-falling	to divide
Fán	2	middle-rising	powder
Fan	3	middle-level	to advise
Fân	4	low-falling	a grave
Fǎn	5	low-rising	excited
Fān	6	low-level	share

(Yuen-Yuen, 1974, in Fung & Roseberry-McKibbin, 1999)

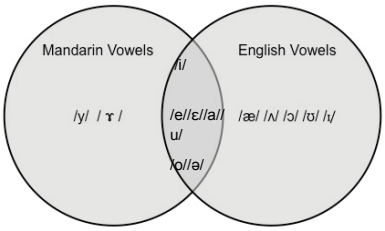
The following charts include information about the vowels and consonants in Mandarin, Cantonese, and English. These Venn diagrams show the sounds that are unique to Mandarin/Cantonese on the left side, the sounds that are unique to English on the right side, and the sounds that are common to both languages in the middle. We can use this information to help determine whether we can expect errors on certain sounds. We would be less concerned about a speaker who is only making errors on sounds that are unique to English but can produce all of the sounds unique to Mandarin/Cantonese as well as the sounds that are shared by the speaker's native language and English. In contrast, when a speaker produces sound errors on the sounds that are common to both languages as well as those that exist only in their native language, this provides evidence of a potential speech disorder. And, of course, the speaker's age and amount of exposure to each language must be taken into account. Just as we don't expect a monolingual English speaking 2-year-old child to accurately produce all of the phonemes of English, we cannot expect a bilingual speaker to produce all of the sounds of his multiple languages without adequate exposure to each language and an appropriate age of development.

Comparison of Vowel Inventories



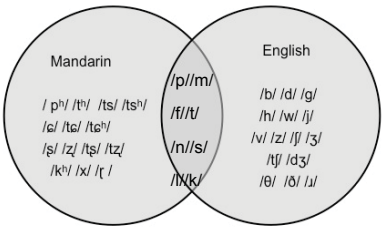
Information based on McLeod, 2007

Comparison of Vowel Inventories



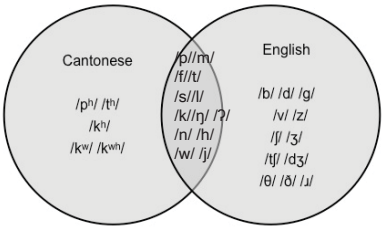
Lin, Yen- Hwei (personal communication, February 25, 2011)

Comparison of Consonant Inventories



Cheng, L. (1991)

Comparison of Consonant Inventories



Cheng, L. (1991); Fung & Roseberry-McKibbin; McLeod (2007)

In both Mandarin and Cantonese, the stop consonants are contrastive in aspiration whereas English stop consonants are contrastive in voicing. These contrastive changes result in a similarity in production of the English-voiced stops and affricates but not completely accurate phonetic representation. Additional phonotactic constraints exist between these languages and English. In both Mandarin and Cantonese, consonant clusters are not produced, words are monosyllabic, and there are a limited number of phonemes permitted in the final position. Mandarin allows for the phonemes /n, ŋ, ʔ/ to be produced in final word position. Cantonese allows these phonemes in final position: /t, k, p, m, n, ŋ/. Mandarin has a retroflex "r" (/ɽ/) that is similar but not exact to the approximant /ɹ/ of English.

continued on page 20

When speaking English, these native language influences may be reflected in the articulatory characteristics of deletion of final consonants, devoicing of phonemes, difficulty with or confusion between the /l/ and /r/ as well as the /tʃ/and /ʃ/ phonemes, and the addition of a neutral vowel such as /ə/ in between consonant clusters as in "puhlay" for "play" or the reduction of the consonant cluster as in "pay" for "play." The substitution of a sound from the native language is a common characteristic in second language production. For instance, neither Mandarin nor Chinese has the [θ] phoneme so a typical substitution is to use the [s] phoneme as in "sin" for "thin." Vowel differences may be produced as well. Native Cantonese speakers may exhibit substitutions such as /e/ for /ɛ/ (raid/red) and /æ/ (snake/snack), /i/ for /ɪ/ (eat/it), /o/ for /ɔ/ (sew/saw), or /a/ for /ʌ/(got/gut). The vowel inventory in Mandarin is limited in the number of short vowels so a lengthening of the short vowels of English (/æ/ /ʌ/ /ʊ/ /ɪ/) may be seen (Cheng, 1991).

The influences of the tonal aspect and monosyllabic/bisyllabic nature of Mandarin and Cantonese is reflected in potential difficulty producing intonation patterns when speaking English. The production of polysyllabic words can result in omission of syllables or inaccurate syllable stress patterns. These difficulties can also be seen across entire sentence level intonation contours, resulting in what is described as a "sounding monotone to the ears of Standard American English speakers" (p. 315 Fung & Roseberry-McKibbin, 1999). Difficulty with both perception and production of intonation contours that indicate questions from statements and emotional states such as enthusiasm versus indifference can also be observed.

Syntactic and Morphological Characteristics of Mandarin, Cantonese, and English

The following is a sampling of some of the most frequently noted differences between these two Chinese dialects and English. Mandarin and Cantonese share very similar grammatical features as these languages are noninflectional and do not use forms such as articles, tense and plural markers, auxiliary and copula verbs, and conjunctions. Both VO (verb-object) and OV (object-verb) sentence constructions are used with pre- and postverbal location of words indicating these and other morphological concepts. For example, the idea of definite versus indefinite (the/a) is expressed using word order rather than an article, as would occur in English. Li & Thompson (1981) provide the following example. "The thief ran away" is " Zéipǎo le" whereas "A thief ran away" is "Pǎo le zéi." Another example provided by these authors reflects indication of place. When place vocabulary is in the preverbal position, it signals where the action is occurring. Postverbal position signals where the people or objects doing the action are located. So the English phrases "He jumped onto the table" and "He jumped (up and down) on the table" would be expressed "Tā zàzhuōzi-shang**tiào**" and "Tā **tiào**zàizhōzi-shang" with 'tiào' being the verb in the sentence. Additional morphological differences are seen with pronoun marking, as neither gender nor case are differentiated (he/she/him/her are all 'tā') and (I/me/my are all 'wó'). Complex sentences are present within Mandarin and Cantonese, but word order (juxtaposition of phrases) rather than conjunctions indicates the morphosyntactic relationship (Jung & Roseberry-McKibbin, 1997). Given these differences a native speaker of either Mandarin or Cantonese may exhibit omission of articles, plurals, copulas, possessives, past tense markers, and prepositions. Misuse of English pronouns is frequently seen ("Me mom is here" or "That him car"). They may produce sentences that do not connect ideas using conjunctions such as "and, that, who." Producing sentences as interrogatives may also be seen as in "You are there?" for "Are you there?" as well as omitting elements as in "You like this?" for "Do you like this?'

As one can see, the languages of Mandarin and Cantonese have significant differences from English that can impact the phonologic and linguistic elements when learning to speak English. As professionals provide services to increasingly culturally and linguistically diverse populations, being aware of what markers can indicate differences versus disorders becomes all the more important.

References

Cheng, L. (1991). Assessing Asian language performance: Guidelines for evaluating limited-English proficient students (2nd ed.). Oceanside, CA: Academic Communication Associates.

Fung, F., & Roseberry-McKibbin, C. (1999). Service delivery considerations in working with clients from Cantonese-speaking backgrounds. *American Journal of Speech-language Pathology*, *8*, 309-318.

Li, C. & Thomspon, S. (1981) An Exploration of Mandarin Chinese. In Lehman, W.P (Ed.). *Syntactic Typology: Studies in the phenomenology of language.* (2nded.) Austin, TX: The University of Texas Press. Retrieved February 25, 2011 from http://www.utexas.edu/cola/centers/lrc/books.

McLeod, S. (2007) The international guide to speech acquisition. Clifton Park, NY: Thomson Delmar Learning.

Peña-Brooks, A. & Hegde, M.N. (2007).Assessment and Treatment of Articulation and Phonologic Disorders in Children (2nd ed.). Austin, TX: Pro-Ed, Inc.

Tao, F. (2007, March 7) More than half of Chinese speak Mandarin. *Xinhua News Agency,* Retrieved February 25, 2011, from http://news.xinhuanet.com/english.