Writing Chinese: A Challenge for Cantonese-L1 and South Asian Hongkongers

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Abstract

This chapter discusses the challenges faced by Chinese and South Asian Hongkongers to acquire, develop and maintain literacy in Standard Written Chinese (SWC). Language acquisition or learning is mediated by speech (DeFrancis 2002; Erbaugh 2002; Perfetti and Dunlap 2008). The relative ease of literacy acquisition, development and maintenance depends largely on how closely speech sounds are mapped onto more or less discrete graphic units of the target language. Being logographic, Chinese characters (*hanzi*, 漢字) are orthographically deep, difficult to learn, and easy to forget. Since the lexis and grammar of SWC are essentially based on Mandarin, speakers of Chinese 'dialects' such as Cantonese do not have the benefit of 'writing as one speaks'. Considerable effort is needed to master Mandarin-based words, which in Hong Kong (and Macau) Special Administrative Region are taught and learned in Cantonese. Although colloquial written Cantonese elements are widespread in mass and social media, they are systematically banned and excluded from school literacy. E-gadgets being so widespread and convenient today, Chinese characters are increasingly inputted electronically rather than composed by hand. That trend accentuates the challenge of remembering and retrieving Chinese characters in the e-era. If Cantonese-L1 Hongkongers find it difficult to develop and maintain literacy in their 'mother tongue', one can easily imagine the linguistic predicament faced by South Asian Hongkongers who need to struggle with learning Cantonese in addition, and who see their life chances significantly curtailed by the Chinese literacy requirement for higher education and civil service positions since the return of sovereignty to China in 1997.

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Introduction

In modern societies, first-language literacy skills are typically introduced to children

at primary level or even earlier. Depending on the writing system of the target language, however, the time and effort it takes to become literate varies from being relatively straightforward to strenuous. There are broadly three main writing systems: alphabetic (e.g. English, Finnish, Italian), syllabic (e.g. Japanese, Cree in North America) and logographic (e.g. Chinese). In general, for those whose first language has an alphabetic or syllabic writing system, literacy training is virtually complete after one has mastered the mapping of speech sounds onto a finite number of graphemes in the alphabet or the syllabary. An alphabetic writing system consists of a set of letters; the sound-to-letter mapping may be relatively transparent (i.e. orthographically shallow, e.g. Finnish and Italian) or nontransparent (i.e. orthographically deep or opaque, e.g. English, Perfetti & Dunlap 2008: 17).

Orthographic depth has implications for the relative ease of first-language literacy acquisition and development. Thus children learning to read and write Finnish or Italian as L1 tend to perform better in reading tasks compared with their age-relevant peers learning to read and write English (Dehaene 2009). The same may be said of first-language learners of the Japanese syllabaries, hiragana and katakana, although in Japanese, Chinese characters called kanji are also used in written Japanese. Perhaps the most often cited example of a language with a logographic writing system is Chinese. In his treatise *The interface between the written and the oral*, Jack Goody (1987: 37) describes the Chinese script as "the most conservative of contemporary writing systems" and that "the complexity of the script clearly limits access to knowledge". As we will try to make clear below, acquiring, developing and maintaining Chinese literacy can indeed be rather challenging. Our focus is on the difficulties encountered by two groups of people as they grapple with the task of reading and writing Mandarin-based Standard Written Chinese (SWC): Cantonese-L1 Hongkongers, and ethnic minorities of South(east) Asian descent who were born and/or grew up in Hong Kong. Before turning to the Hong Kong literacy context, we will first discuss and elucidate the main characteristics of the Chinese writing system. Chinese characters will be romanized in both Cantonese and Mandarin (except those specific to Cantonese). The LSHK (Linguistic Society of Hong Kong) romanization system, JyutPing, will be used to transliterate Cantonese. The two numbers at the end of a Cantonese syllable refer to one of the six tone contours (high level 55, mid level 33, low level 22; high rising 35, low rising 23, and falling 21). Mandarin (Putonghua) pronunciation will be transliterated using pinyin.

Chinese *hanzi*: A logographic writing system

Chinese is written with a logographic (i.e. non-alphabetic) script, which means that the pronunciation of its basic units *hanzi* (漢字, 'Chinese character') cannot be directly deduced from the way they are written (DeFrancis 2002; Erbaugh 2002; Taylor & Taylor 2014; Wang et al. 2009; Wang & Tsai 2015). Even though the lexis and grammar of SWC is essentially based on the national language Mandarin (also known as Putonghua in mainland China, Guoyu in Taiwan), in principle native speakers of all other Chinese varieties may read the same *hanzi* and pronounce them in their respective 'dialects', such as Cantonese. As noted by Wang and Yang (2008: 125):

> The basic grapheme [in Chinese] is a character, a symbol that represents a morpheme. Each character maps onto a syllable that is a morpheme or word. Since the characters correspond to morphemes rather than the individual sounds of the spoken language, speakers of different Chinese languages may understand the script, even though the spoken languages are not mutually intelligible.

To illustrate, consider the following headline of the front-page story in a leading Hong Kong Chinese newspaper, *Sing Tao Daily* (星島日報, 2016-03-25, p. 1):

<div align="center">

比利時拘三人 疑涉法恐襲陰謀

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That news story concerns the latest development of the Belgian government's efforts to track down the terrorists believed to be responsible for the carnage in Paris in November 2015, and linked to the bomb attacks in Brussels in March 2016. As shown in (1) below, the same headline is generally comprehensible to literate readers in Cantonese (1b) or Mandarin (1c), subject to the caveat that mainland Chinese readers may be slightly inconvenienced by the traditional script (1) used in Hong Kong (and Taiwan), unlike the simplified script (1a) used in the mainland (and Singapore).

(1) 比利時 拘 三人　　疑　涉　法　恐襲　　陰謀
(a) 比利時 拘 三人　　疑　涉　法　恐袭　　阴谋
(b) bei^{35}lei^{22}si^{21} keoi^{55}　saam^{55}jan^{21}　ji^{21}　sit^{33}　faat^{55}　hung^{35}zaap^{22}　jam^{55}mau^{21}
(c) bǐlìshí　　　jū　sān rén　　yí　shè　fǎ　kǒng xí　　yīnmóu
　　Belgium　　arrest　three person　suspect involve France terrorist-attack conspiracy
　'Belgium arrests three suspects involved in the terrorist-attack conspiracy in France.'

In this headline (1), where the context is unequivocal and all but the last three

characters are written identically, literacy should not be a problem to readers of the simplified script (1a). Except for 比利時, which is the romanized form of the French word 'Belgique', each of the other *hanzi* is morphemic and pronounced with one syllable. In fact, the same is true of the three characters 比利時, but in this collocation, their phonetic values – in any Chinese 'dialect' – are foregrounded while their respective semantic values are ignored. Linguistically, therefore, the absolute majority of *hanzi* are morpho-syllables (e.g. 疑, pronounced as ji^{21} in Cantonese and *yí* in Mandarin, means 'suspect'). The majority of Chinese words, however, consist of more than one *hanzi*, with disyllabic words being by far the most common (e.g. 恐襲 /恐袭, $hung^{35}zaap^{22}$/*kǒngxí*, literally fear-attack, meaning 'terrorist attack', is itself an abbreviation of two disyllabic words: 恐怖, $hung^{35}bou^{33}$/*kǒngbù*, 'terror', 'frightful'; and 襲擊/袭击, $zaap^{22}gik^{55}$/*xíjī*, 'attack'). The main scriptal characteristics of *hanzi* are as follows:

> Each Chinese character is composed of basic strokes, the smallest building materials for characters. There are 24 basic strokes, and sets of specified strokes are combined to form radicals, the basic components of Chinese characters. The combination of strokes must follow certain stroke-positional constraints, and random combination of strokes that do not follow these constraints produce illegal radical forms. (Wang & Yang 2008: 125)

There are two kinds of radicals or components: semantic and phonetic. For instance, whereas 丁 ($ding^{55}$/*dīng*) is an independent morpho-syllable with such disparate meanings as 'male adult', 'small cubes of meat or vegetables' in addition to being a Chinese surname, the same grapheme functions as a phonetic component in other characters:

Character with 丁 as phonetic component	Semantic component (部首, $bou^{22}sau^{35}$/*bùshǒu*, 'section header')	Pronunciation	Meaning
訂	言 (jin^{21}/*yán*, 'speech')	$ding^{21}$/$deng^{21}$/*dìng*	'to agree', 'to book or reserve', 'to subscribe (e.g. to a magazine)'
頂	頁 (jip^{22}/*yè*, 'head')	$ding^{35}$/$deng^{35}$/*dǐng*	'top', 'peak'; 'most', 'best'; 'to carry on one's head'
釘	金 (gam^{55}/*jīn*, 'metal')	$deng^{55}$/*dīng*	'nail', 'spike'; 'to pursue closely'

Where two alternative pronunciations in Cantonese exist (e.g. 訂: $ding^{21}$/$deng^{21}$), one is the 'reading pronunciation' (訓讀, $fan^{33}duk^{22}$/*xùndú*), while the other is the

colloquial pronunciation. Another 'phonetic compound' where 丁 functions as a phonetic component is 叮 (*ding^{55}/dīng*), which has 口 (*hau^{35}/kǒu*) 'mouth' as its semantic radical and carries the onomatopoeic meaning 'tinkling or jingling sound', among others. Apart from being the nick name of the tram, 叮叮 (*ding^{55}ding^{55}*), the oldest, beloved vehicle on the streets of Hong Kong Island, 叮 is also embedded in the Cantonese rendition of the popular TV program, *America's Got Talent*: 全美一叮 (*cyun^{21}mei^{23}jat^{55}ding^{55}*), in reference to the tinkling sound when the performer(s) is/are dismissed.

No less than 90 percent of the thousands of Chinese characters are analyzable as being composed of a semantic radical and a phonetic component (Lee 1989); the former gives some indication of the character's meaning, while the latter provides some clue to its pronunciation. According to Wang and Yang (2008: 125-126), of the 541 radicals listed in the *Chinese Radical Position Frequency Dictionary* (1984), 303 are independent characters (e.g. 車, ce55/chē, 'vehicle'), 238 are not (e.g. 氵 denotes 'water'); the latter "must be combined with other radicals to form characters". As for stroke-positional constraints, Wang and Yang (2008: 125) refer to the general order of strokes for writing *hanzi*, which broadly follows three cardinal principles: from top to bottom, left to right, and outside to inside. In Greater China, these principles are taught to primary pupils with the help of *hanzi* grids such as those in Figures 1 and 2.

<For figure 1, please refer to publisher version>

Figure 1. Indicative sequence of strokes for writing the character 好 (*hou^{35}/hou^{33}/hǎo/hào*, 'good',

'well'). Source: https://play.google.com/store/apps/details?id=com.wiseman.writing&hl=zh_TW.

<For figure 2, please refer to publisher version>

Figure 2: Indicative sequence of strokes for writing the first two characters of the tri-syllabic word 'multi-media' (*do⁵⁵mui²¹tai³³/duōmíitǐ*). Source: 'Images for 練習寫漢字', Google search.

To master a *hanzi*, therefore, the learner is expected to grasp (a) its 'spelling' or written form, (b) its pronunciation (segmental and tone contour), and (c) meaning. These three aspects of lexical knowledge are generally referred to in Chinese as 形 (*jing²¹/xíng*, 'form'), 音 (*jam⁵⁵/yīn*, 'pronunciation') and 義 (*ji²²/yì*, 'meaning') (Table 1).

	形 (*jing²¹/xíng*, 'form')	音 (*jam⁵⁵/yīn*, 'pronunciation')	義／义 (*ji²²/yì*, 'meaning')
Cantonese	陰謀	*jam⁵⁵mau²¹*	'conspiracy'
Mandarin	阴谋	*yīnmóu*	

Table 1. Three aspects of lexical knowledge: (a) 'spelling' or written form, (b) pronunciation, and (c) meaning.

It should be clear that, compared with learning to read and write an alphabetic language, developing Chinese literacy requires considerably more effort due to a lack of orthographic transparency. Indeed, written Chinese is often cited as an orthographically deep writing system, which has significant implications for the efficiency with which Chinese literacy is acquired, developed and maintained, for native and non-native speakers alike (Perfetti & Dunlap 2008; Wang & Yang 2008).

Hong Kong SAR: Language needs and the Chinese literacy gap

The Hong Kong Special Administrative Region (SAR) was renationalized on 1 July 1997, thereby putting an end to over 150 years of British colonial rule from 1842. Since then, the SAR is generally recognized as the most international city of the

People's Republic of China. With just over 1,050 km^2, Hong Kong is home to over 7.1 million inhabitants, making it one of the most densely populated metropolises in the world. Some 93.6 percent of the population is ethnic Chinese (ca. 6.6m). According to 2011 Census (2012), 89.5 percent reported using Cantonese as their 'usual language', while 42.6 percent used English as 'another language'. Of the 6.5 percent of ethnic minorities (0.45m), about three-quarters were Indonesians and Filipinos (3.8 percent), who mostly made a living by working as domestic helpers. Indians, Pakistanis, and Nepalese together made up about 0.89 percent; many of them had lived in Hong Kong for two or more generations. For ease of exposition, and following common practice in the local media, we will use the term 'South Asian' (SA) to refer to ethnic Indians, Pakistanis, Nepalese, Filipinos and Indonesians.

In terms of manpower needs, there is constant demand for a plurilingual workforce in Hong Kong, where the primary economic activities are characteristic of a knowledge-based economy. Banking, investment and international finance are widely held to be the pillars of 'Asia's World City', followed by various industries ranging from imports/exports, telecommunications (e.g. CNN regional headquarters), logistics and transport, tourism and hotels, to restaurants and catering, retail and wholesale, and real estate services. All this helps explain why in addition to Cantonese, fluent English, spoken and written, is routinely listed as a requirement for practically all white-collar positions, and an advantage for blue-collar jobs (e.g. security guard, construction foreman). Further, Putonghua (Mandarin) is increasingly needed due to proximity to China and rapidly expanding cross-border activities, especially in the business and tourism sectors. For instance, non-Putonghua-speakers stand little chance of being hired as shop assistants at megamalls and other retail outlets along the railway lines linking the SAR with mainland China.

The manpower needs outlined above have implications for the language policy of the Hong Kong SAR known as 'biliteracy and trilingualism' (兩文三語 *loeng^{23} man^{21} saam^{55} jyu^{23}/liǎng wén sān yǔ*) – ability to read and write Chinese and English, and to speak and understand Cantonese, English and Putonghua (Lee & Leung 2012; Li 2009). After being implemented for over 16 years, however, the language policy's intended learning outcomes leave much to be desired. Below, we will focus on the challenge of acquiring, developing and maintaining Chinese literacy faced by Chinese and SA Hongkongers.

Cantonese-L1 Hongkongers learning Standard Written Chinese (SWC)

In Hong Kong, written Chinese adopts the traditional script (e.g. 電, *din*^{22}, 'electricity'; 雲, *wan*^{21}, 'cloud'), which consists of more strokes than the simplified script in mainland China (compare: 电, 云), and is therefore generally more difficult to learn. Wang et al. (2009: 404) point out that:

> Because of the nature of *hanzi*, the basic unit of reading and writing is the single character, and they must be learned one by one. Moreover, about two thousand characters are necessary for text-reading and composition. (...) in the traditional education of Chinese literacy, the focus was on reading and writing *hanzi*.

Chinese literacy is thus an important skill for education and work-related purposes. Job adverts routinely require a working knowledge of written Chinese in addition to Cantonese and English. Formal education is looked upon as the means or avenue for developing Chinese literacy. One of the important goals of the 12-year compulsory education policy since September 2012 is to graduate secondary school-leavers (age 18) with the ability to recognize around 2,600 *hanzi* which are needed for reading Chinese newspapers, most of which being introduced at primary level. Individual *hanzi* may be combined to form di- or poly-syllabic words. In the government-commissioned, corpus-based Chinese lexicon compiled for primary school teachers, 3,171 characters and 9,706 words are listed (Education Bureau 2008). Given its logographic nature, written Chinese requires repeated practice. There is no shortcut. Thus a lot of time is devoted to helping primary pupils to practice the normative sequence of strokes required of individual *hanzi*. For SA students, the task is doubly more challenging, in that under the Hong Kong SAR government policy, ethnic minorities are expected to develop fluency in Cantonese and master Chinese literacy like their Chinese peers (see §§ 22–24, Legislative Council Panel on Constitutional Affairs 2009; Education Bureau 2015, 2016).

In addition to copying and writing practice, 'dialect' speakers have to come to terms with two additional literacy challenges. First, SWC lexis and grammar are based on Mandarin, although SWC-specific characters are pronounceable in Cantonese – thanks to the vernacular instruction policy in Hong Kong (and Macau) since the 1950s. Even though written Cantonese elements – non-school literacy – are commonly found in 'soft' genres of local, especially social, media (Snow 2004), they are banned in school (see Table 2). Like other 'dialect' speakers, therefore, Cantonese-L1 learners do not write the way they speak (Li 2009). Such a diglossic challenge is captured by the Chinese idiom *ngo*^{23} *sau*^{35} *se*^{35} *ngo*^{23} *hau*^{35} (我手寫我口, *wǒ shǒu sě wǒ kǒu*, literally 'my hand write my mouth'), which is generally true of

first-language learners in the Mandarin-speaking areas (roughly 70 percent of the population in China) but not those in the 'dialect' areas roughly south of the Yangtze River (except the southwest). As the 'write as you speak' benefit (Coulmas 2013: 43) is not available to 'dialect' speakers, they have to make an effort to recognize a large subset of SWC vocabulary used only in writing but not in speech. Table 2 shows a list of high-frequency SWC words and their colloquial written Cantonese equivalents.

Table 2. Mandarin-based SWC words and their equivalents in colloquial written Cantonese

Meaning	School literacy: Standard Written Chinese (SWC) taught in Cantonese	Non-school literacy: Colloquial written Cantonese banned in school
eat	吃 hek^{33}	食 sik^{22}
drink	喝 hot^{33}	飲 jam^{35}
see/watch	看 hon^{33}	睇 tai^{35}
sleep	睡 $seoi^{22}$	瞓 fan^{33}
quarrel	吵架 $caau^{35}gaa^{33}$	嘈/嗌交 cou^{21} / $aai^{33}gaau^{55}$
table/desk	桌子 $coek^{33}zi^{35}$	枱 toi^{35}
chair	椅子 $ji^{35}zi^{35}$	凳 $dang^{33}$
drawer	抽屜 $cau^{55}tai^{33}$	櫃桶 $gwai^{22}tung^{35}$

A second major challenge is an increasingly popular social practice in society as a result of the growing significance of electronic communication worldwide. Since the beginning of the new millennium, electronic communication in many of the world's languages, including Chinese, has become increasingly user-friendly and affordable. Until the 1990s, inputting non-alphabetic *hanzi* into the computer used to be complicated and technologically cumbersome. Rapid advancement in information and communication technologies (ICT) in the past decades has laid that problem to rest, however. Today, users of various mobile gadgets who are literate in Chinese can input *hanzi* at ease on their computers, cell phones, tablets or other hand-held devices thanks to a variety of inputting methods, which are of three main types: (i) hand-writing-based, (ii) character-based (e.g. using inputting systems like 倉頡, *Cong^{55}kit^{33}/Cāngjié* or 簡易, *Gaan^{35}ji^{22}/Jiǎnyì*), and (iii) pronunciation-based (e.g. Mandarin speakers may use pinyin to key in *hanzi* at will). Unlike the third type of inputting method, the former two require users to remember the exact orthographic forms of individual characters, including the normative sequence of strokes, and to use that meta-knowledge to input the *hanzi*. In general, hand-writing-based and character-based inputting methods, like writing *hanzi* in general, tend to be more difficult to retain and easier to forget, whereas pronunciation-based inputting methods are generally easier, hence the popularity of the latter.

One consequence of this ICT development is that in digital communication, written Chinese is increasingly mediated by electronic devices rather than handwriting. This leads to another problem, which is captured by the Chinese aphorism: *zap[55] bat[55] mong[21] zi[22]* (執筆忘字, *zhí bǐ wàng zì*, 'pen-ready to write a character but don't know how to'). This is consistent with recent reports on declining Chinese literacy skills among young people. In one news story entitled 'Chinese characters a victim of digital era', Zuo (2013) noted that many computer and mobile phone users in China are facing "growing difficulty in reading and writing their language in the keyboard era". Similarly, in a study of 32 elementary Chinese as a Foreign Language (CFL) students' performance in and attainment of their learning of Chinese characters in two writing tasks, one handwritten, the other word-processed, Yu et al. (2015) found that word-processor was generally preferred as a writing medium, partly because the machine-generated output looked more professional compared with sloppy handwritten characters. In addition, "it is interesting to consider the experience of many literate Chinese persons that the frequent handwriting of Chinese characters helps reinforce one's memory of characters; whereas pinyin typed characters may soon be forgotten" (Yu et al. 2015: 15).

South Asian Hongkongers learning SWC

If acquiring and maintaining literacy in Chinese is time-consuming and ineffective for Cantonese-L1 Hongkongers, the problem is understandably more acute for SA communities whose first language has typologically nothing in common with Chinese. Our focus is on descendants of first- or second-generation migrants from their homeland, which is located within today's India, Indonesia, Nepal, Pakistan, or the Philippines. Children born to SA parents in Hong Kong are disadvantaged by the post-1997 language policy in the SAR (Gu & Patkin 2013; Ku et al. 2005; Li & Chuk 2015), in that applicants aspiring to join the civil service or be admitted into a local tertiary institution must possess a threshold level of written Chinese which, from 2012, is a pass in the Chinese Language subject at the Hong Kong Diploma of Secondary Education (HKDSE) Examination (comparable to an A-level pass in UK). Being a compulsory HKDSE subject, the Chinese Language has a passing rate of only about 50 percent, hence the nick name 'lethal exam paper' (死亡之卷, *sei[35]mong[21] zi[55]gyun[35]/sǐ wáng zhī juǎn*). Such a new requirement makes it very difficult for SA Hongkongers to gain access to Government-funded higher education or to qualify for civil service positions.

Based on 200 completed questionnaires collected from SA students aged 17-19 (Form 4–7, or Grade 10–13) and 20 individual interviews randomly selected from the survey respondents, Ku et al. (2005) found that, for members of these "invisible minorities" (p. 1), the main difficulties were "due to their incapability in Chinese language as they cannot speak the language while for those who can speak, they cannot read or write Chinese" (p. iii). Despite the fact that most of the 20 interviewees were born in Hong Kong or had lived there for over seven years, only two could speak Cantonese, while the majority resisted learning written Chinese partly because they found it too difficult to learn, but also because, with their strengths in English, they planned to further their studies overseas. With a high level of English proficiency, they could still access a fairly wide range of professions in the local and international job market, provided knowledge of written Chinese is not required. This is reflected in the questionnaire respondents' choice of future careers: a total of 45.5% aspired to be professionals such as doctors, lawyers, and engineers (29.5%) or associate professionals (16%) (p. 33). In Hong Kong SAR, however, career paths or options open to SA students without Chinese literacy are clearly limited. Thus, seriously affected are not so much English-dominant SA students who are relatively well off and outward-looking in terms of educational and job opportunities, but those who were born to socioeconomically modest parents and whose home support is not enough to hone their literacy skills in English or Chinese.

The linguistic predicament faced by SA students is borne out in our study involving 15 SA English majors aged 18-22 (Li and Chuk 2015), with a focus on their experiences in learning spoken Cantonese, written Chinese, English and their home/homeland language(s). All but three participants reported having experienced grave difficulties when learning to write *hanzi*, which was often compared to drawing pictures. Our findings point to some combination of social and linguistic factors leading to SA students' poor learning outcome in Chinese literacy development. Among the social factors are (a) lack of opportunities to interact with Chinese peers due to a segregation policy (i.e. different classes); (b) lack of home support for Cantonese, the medium of instruction in Chinese and other content subjects; and (c) lack of after-school tuition and support (cf. Tinker-Sachs & Li 2007; cf. Ku et al. 2005).

More daunting, however, are several linguistic factors which made it difficult for these multilingual student participants (9 out of 15 spoke three languages or more) to develop a grade-appropriate level of Chinese literacy. All 15 participants pointed to the non-alphabetic nature of Chinese as the primary source of learning difficulty. Many compared the relative ease of learning English and reported suffering a lot of

frustration when trying to practice writing Chinese characters. When asked how they learned to recognize and write Chinese characters, many reported using the same strategy as advised by their teachers: copying and copying. For instance, one female Nepalese participant Ne1F said that in preparation for the Chinese exam, "I just remember I was writing, copying a lot of characters, so I was just basically memorizing (...), just copying the Chinese characters over and over." Another Indian participant In3F summarized her teacher's advice: "Write them [Chinese characters], then remember them, dictate them, try to use them in a paragraph". When asked how many Chinese characters that she could recognize, In3F said "I used to know a lot, but you know when you don't practice, you lose [them]". In linguistic terms, the learning barrier of the 15 SA student participants may be explained by a lack of metalinguistic awareness at various levels: phonological, grapho-phonological, morphological and grapho-morphological (Kuo & Anderson 2008: 42, 47, 53-54).

Research shows that regardless of the language and its writing system, reading and writing is mediated primarily by speech (DeFrancis 2002; Erbaugh 2002; Perfetti & Dunlap 2008). As Cantonese is the medium of teaching and learning Chinese in Hong Kong, learners who have little knowledge of Cantonese would find it very difficult to grasp the complex sound-graph relationships in Chinese characters. This in turn makes it very difficult for them to follow the mainstream Cantonese-medium curriculum. Table 3, adapted from a website created to facilitate SA learners' learning of Chinese, gives some idea about the challenge they face.

Table 3: SWC material to help South Asian learners learn Chinese
(http://www.dragonwise.hku.hk/sa/index_e.htm; accessed 12 January 2015)

《節日》	"Festival"

印度人，排燈節；
排燈節，點油燈；
點油燈，油燈亮；
油燈亮，照街上.
	(1) Indians celebrate Diwali.
	    In Diwali, people light lamps.
	    Light the lamps, and the lamps shine.
	    The lamps shine in the street.

巴基斯坦人，過齋月；
過齋月，要守齋；
守完齋，同慶賀；
同慶賀，開齋節.
	(2) Pakistanis celebrate Ramadan.
	    In Ramadan, people have to fast.
	    After Ramadan, celebrate together.
	    Celebrate together Eid-ul-fitr.

尼泊爾人，達善節； 達善節，點紅點；	(3) Nepalese celebrate Dasain. In Dasain, people draw a red dot.

點紅點，在額上； 在額上，表吉祥.	A red dot is drawn on the forehead. On the forehead, it signifies good luck.
中國人 ，過新年； 過新年，說：「恭喜！」 恭喜您，添福氣； 添福氣，最歡喜.	(4)　Chinese celebrates New Year. In New Year, people say, "congratulations!" Congratulate you to have more luck. More luck, be the most delighted.

In addition to fostering multicultural awareness, part of the learning goal of the theme 'Festival' is clearly to valorize SA students' respective ethnic identities by encouraging them to express culturally meaningful content in Chinese. Such a goal, however, is rendered difficult by the fact that no romanization is used to bridge the link between logographic characters and their Cantonese pronunciation, the latter being clickable on the screen. For instance, learning to write the word that denotes their homeland, Pakistani learners would find it relatively straightforward in English, for each of the three syllables *pa-ki-stan* is made up of graphic units whose sound values may be deduced based on their pronunciation in other words (compare, e.g., *park/kiss/stand*). Once the root has been learned, the effort required to extend to its derivatives (e.g. *Pakistani*) is minimal. By contrast, the corresponding word in Cantonese contains four syllables: *baa^{55}gei^{55}si^{55}taan^{35}*, which are mapped onto four characters 巴基斯坦. Their pronunciation is however nontransparent, in that no part of their written form allows the learner to recall their pronunciation. One consequence is that rote-learning is the main learning strategy for remembering their pronunciation, while copying – as many times as it takes for a character to be literally imprinted in the learner's mind – is standard pedagogy recommended by both the teacher and textbook writer.

Another major source of frustration, as shown in our findings (Li & Chuk 2015), is related to the difficulty in recognizing and producing morpho-syllables with the normative tone contour in Cantonese, which has six distinctive tonemes (see Table 4, where tone levels are alternatively marked by a number from 1 to 6).

Table 4: Six distinctive tonemes in Cantonese (LSHK Romanization Jyutping, 粵拼, Linguistic Society of Hong Kong', http://www.lshk.org/node/31)

Cantonese Toneme	High level	High rising	Mid level	Low falling	Low rising	Low level
LSHK transcription with tone contours	saam^{55} (saam1)	gau^{35} (gau2)	sei^{33} (sei3)	ling^{21} (ling4)	ng^{23} (ng5)	ji^{22} (ji6)

Chinese characters	三	九	四	零	五	二
Meaning	'three'	'nine'	'four'	'zero'	'five'	'two'

Given a *hanzi*, failure to articulate the expected tone contour would be heard as a different morpho-syllable, sometimes resulting in funny associations that would trigger laughter on the part of the interlocutor(s) (Li et al. 2016). One instructive example in our data (Li & Chuk 2015) is related to the disyllabic expression commonly used to ask mini-bus drivers to stop: *jau^{23}lok^{22}* (有落, literally 'have [to] descend'). According to the Filipino participant, Ph3F, the driver did not let her off after she uttered *jau^{23}lok^{22}*, not until another male passenger shouted 'the same', but who made a few additional, apparently unkind remarks that Ph3F found insulting. What she did not understand was that, without the normative tone contour, the two morpho-syllables would be heard as saying something else, or simply unintelligible.

Discussion and Conclusion

In any country or region, governance can hardly be effective if members of the citizenry are unable to read information from print-based sources (e.g. important hygiene measures against public health risks such as avian flu or the zika virus). At the individual level, apart from one's life being unduly inconvenienced, being illiterate is tantamount to a glass ceiling, preventing one from actualizing his or her educational and career aspirations. The problem is all the more acute for migrants living in diasporas, whose home(land) languages are marginalized and whose access to the dominant local language(s) is subject to social and linguistic constraints. The roots of illiteracy cannot be properly understood without examining the specific social and economic conditions of the illiterate populace (Street 2003: 77). On the relationship between adult illiteracy and social stratification and inequality, Coulmas (2013) similarly comments that:

> it is clear from all available statistics that adult illiteracy, low income and low social status go hand in hand. Poor and disadvantaged families are overrepresented among functional illiterates, and people with literacy problems are more likely than others to have low-paying or no jobs and to be at risk of falling into poverty. (Coulmas 2013: 64)

This is by and large true of SA Hongkongers born and raised in socioeconomically modest families, whose life chances in education and job opportunities are seriously curtailed by an unfriendly language policy since the return of Hong Kong's

sovereignty to China in 1997. Lack of knowledge of Mandarin-based Chinese literacy, in particular the ability to recognize and produce Chinese characters at will, is one major hurdle barring SA Hongkongers from enjoying the same rights as their Cantonese-L1 counterparts, namely access to higher education and civil service positions. With limited education opportunities and restricted career prospects, social mobility seems beyond their reach, not to mention integrating into the mainstream Cantonese-dominant society (Legislative Council Panel on Constitutional Affairs 2009; EOC 2012). At the policy level, therefore, much needs to be done by way of providing the necessary support to help SA Hongkongers overcome their linguistic predicament. In this regard, there is a glimmer of hope that policy-wise change for the better is in the pipeline: (a) instead of segregating Chinese and SA students, school principals are encouraged to mix them in the same class where possible; (b) Chinese language specialists have been engaged to draft a separate Chinese as a Second Language (CSL) curriculum with a view to better catering for SA students' practical needs for Cantonese and written Chinese; and (c) academics with relevant expertise have been called upon to develop teacher training programmes to equip teachers with sound pedagogical knowledge and skills they need to impart Chinese literacy to minority students more effectively (see, e.g., Tse et al. 2007; Loh & Tse 2012).

As for Chinese Hongkongers whose vernacular Cantonese is generally not used for writing Chinese, they have no choice but to continue putting up with learning and using a language that they do not speak. Reading is rendered relatively more difficult compared with Mandarin-L1 speakers, whose native language provides the lexico-grammatical basis for Standard Written Chinese. Learning to become literate in SWC is no simple feat. Cantonese elements that surface in the school literacy training process are systematically purged, while students are constantly reminded to literally leave their Cantonese-specific elements at the door. Neither is obvious, however, due in part to the natural tendency of writing as one speaks (Coulmas 2013: 43), but also because unlike in mainland China, Cantonese is used as the medium of teaching and learning Chinese and other content subjects. Sound pedagogies notwithstanding (Tse et al. 2007), so long as 'dialectal' elements proper to the vernacular are banned in formal schooling, learning to read and write SWC will remain a major challenge for Cantonese-dominant learners.

References cited

2011 Census. (2012). *Thematic report: Ethnic minorities*. Hong Kong Special Administrative Region: Census and Statistics Department.

Chinese Radical Position Frequency Dictionary. (1984). Changsha: Hunan Institute of Computer Science.

Coulmas, Florian. (2013). *Writing and society*. Cambridge: Cambridge University Press.

DeFrancis, John. (2002). The ideographic myth. In M.S. Erbaugh (Ed.), *Difficult characters: Interdisciplinary studies of Chinese and Japanese writing*. The Ohio State University: National East Asian Language Resource Center. 1-20.

Dehaene, Stanislas. (2009). *Reading in the brain. The science and evolution of a human invention*. New York: Viking.

Education Bureau (2008). *Lexical items with English explanations for fundamental Chinese learning in Hong Kong schools*. Chinese Language Education Section, Curriculum Development Institute, Hong Kong Government.

Education Bureau. (2015). Education opportunities in Hong Kong. http://www.edb.gov.hk/attachment/en/student-parents/ncs-students/overview/Education%20Opportunities%20in%20HK_%20Final%20version_IPR_Oct%202015.pdf. Accessed 4 April 2016.

Education Bureau. (2016). *Education services for non-Chinese speaking (NCS) students*. http://www.edb.gov.hk/en/student-parents/ncs-students/about-ncs-students/index.html. Accessed 3 April 2016.

EOC (Equal Opportunities Commission) (2012). Study on racial encounters and discrimination experienced by South Asians. Centre for Civil Society and Governance, University of Hong Kong, and Policy 21 Limited. http://www.eoc.org.hk/EOC/Upload/UserFiles/File/ResearchReport/201203/Race_eFull%20Report.pdf. Accessed 3 April 2016.

Erbaugh, Mary S. (Ed.) (2002). *Difficult characters. Interdisciplinary studies of Chinese and Japanese writing*. The Ohio State University: National East Asian Language Resource Center.

Goody, Jack. (1987). *The interface between the written and the oral*. Cambridge: Cambridge University Press.

Gu, Michelle Mingyue & Patkin, John. (2013). Heritage and identity: Ethnic minority students from South Asia in Hong Kong. *Linguistics and Education* 24: 131-141.

Ku, H. B., Chan, K. W., Chan, W. L. & Lee, W. Y. (2003). *A research report on the life experience of Pakistanis in Hong Kong*. Center for Social Policy Studies, the Hong Kong Polytechnic University and S.K.H. Lady MacLehose Center.

Kuo, Li-Jen & Anderson, Richard C. (2008). Conceptual and methodological issues in comparing metalinguistic awareness across languages. In Keiko Koda & Annette

M. Zehler (eds.), *Learning to read across languages. Cross-linguistic relationships in first- and second-language literacy development*. New York & London: Routledge. 39-67.

Lee, C.M. (1989). Lee's Zhongwen Zidian [李氏中文字典, Lee's Chinese dictionary]. Hong Kong: Hong Kong Chinese University Press. [李卓敏]

Lee, Kwai Sang & Leung, Wai-Mun. (2012). The status of Cantonese in the education policy of Hong Kong. Multilingual Education 2(2). http://www.multilingual-education.com/2/1/2

Legislative Council Panel on Constitutional Affairs. (2009). *Hearing of the Report of the Hong Kong Special Administrative Region under the International Convention on The Elimination of All Forms of Racial Discrimination*. 16 November 2009. http://www.had.gov.hk/rru/english/aboutus/Ethnicforum/Encl-4_20091116.pdf. Accessed 9 March 2016.

Li, David C. S. (2009). Towards 'biliteracy and trilingualism' in Hong Kong (SAR): Problems, dilemmas and stakeholders' views. *AILA Review* 22: 72-84.

Li, David C. S. & Chuk, Joanne Y. P. (2015). South Asian students' needs for Cantonese and written Chinese in Hong Kong: A linguistic study. *International Journal of Multilingualism*.
http://www.tandfonline.com/doi/pdf/10.1080/14790718.2015.1009375.

Li, David C.S., KEUNG Shuet, POON Hon Fong, & XU Zhichang. (2016). Learning Cantonese as an additional language (CAL) or not: What the CAL learners say. Global Chinese 2(1).

Loh, Elizabeth Ka Yee and Tse, Shek Kam (羅嘉怡、謝錫金) (2012). 促進非華語幼兒漢字學習的校本課程設計初探 ('An investigation of school-based curriculum of Chinese character learning for non-Chinese kindergarteners'). Hanja Hanmun Kyoyug (Han Character and Classical Writing Language Education) 28, 171-195.

Perfetti, Charles A. & Dunlap, Susan. (2008). Learning to read: general principles and writing system variations. In Keiko Koda & Annette M. Zehler (eds.), *Learning to read across languages. Cross-linguistic relationships in first- and second-language literacy development*. New York & London: Routledge. 13-38.

Snow, Don. (2004). *Cantonese as written language: The growth of a written Chinese vernacular*. Hong Kong: Hong Kong University Press.

Street, Brian. (2003). What's "new" in New Literacy Studies? Critical approaches to literacy in theory and practice. *Current Issues in Comparative Education* 5(2): 77-91.

Taylor, Insup & Taylor, M. Martin. (2014). *Writing and literacy in Chinese, Korean and Japanese (Revised edition)*. Amsterdam/Philadelphia: John Benjamins.

Tinker Sachs, Gertrude & Li, David C. S. (2007). Cantonese as an additional language: Problems and prospects. *Multilingua* 26:95-130.

Tse, Shek Kam, Marton, Ference, Ki, Wing Wah & Loh, Elizabeth Ka Yee. (2007). An integrative perceptual approach for teaching Chinese characters. *Instructional Science 35*, 375–406. DOI 10.1007/s11251-006-9011-4.

Wang, Feng & Tsai, Yaching (2015). Chinese writing and literacy. In William S-Y. Wang & Chao Fen SUN (eds.), *Oxford Handbook of Chinese Linguistics*. Oxford: Oxford University Press. 554-564.

Wang, Feng, Tsai, Yaching, & Wang, William S.-Y. (2009). Chinese literacy. In D.R. Olson & N. Torrance (eds.), *The Cambridge handbook of literacy*. New York: Cambridge University Press. 386-417.

Wang, Min & Yang, Chin Lung. (2008). Learning to read Chinese: Cognitive consequences of cross-language and writing system differences. In Keiko Koda & Annette M. Zehler (eds.), *Learning to read across languages. Cross-linguistic relationships in first- and second-language literacy development*. New York & London: Routledge. 125-153.

Yu, Zhu, Shum, Shiu-Kee Mark, Tse, Shek-Kam Brian and Liu, Jinghui Jack. (2015). Word-processor or pencil-and-paper? A comparison of students' writing in Chinese as a foreign language. *Computer Assisted Language Learning*. DOI: 10.1080/09588221.2014.1000932.

Zuo, Mandy. (2013). Chinese characters a victim of digital era. *South China Morning Post*, 2013-8-20, p. A6.