A Study on Hong Kong Young Adults' English Pronunciation: The Influence of Native Language and American Pop Culture

C. W. Y. Lau* and R. S. Y. Ho

Abstract—Like in many English-speaking countries, Hong Kong, despite its small area, has its own variation of English, covering accent and phonology. This paper not only studies native Hong Kong people's attitude towards this variety, but also their English pronunciation under the influence of a rising American English ("AmE") environment (L3 affecting L2) and their mother tongue (L1 affecting L2). 14 post- secondary students from various colleges in Hong Kong were investigated. Their data displayed many AmE features including postvocalic [1], and Hong Kong English (HKE) features such as simplification of consonant cluster and deletion of final consonant. Overall, HKE is still the dominant accent of many speakers in Hong Kong.

Index Terms—American English, English varieties, Hong Kong English, language, and pop culture

I. INTRODUCTION

As a former British colony from 1841 to 1941, British English (BrE) was once Hong Kong's sole official language. However, the handover of Hong Kong from Britain to Mainland China and the struggle for equal status between Chinese and English has weakened the popularity of English ever since. Nevertheless, its history has sculpted Hong Kong's English language culture and is now commonly described as "Hong Kong English" ("HKE").

This variation is native to many local Hong Kong people. It can be distinguished by its distinctive pronunciation due to the vocal features influenced by Cantonese. Nonetheless, the medium of instruction by many schools (such as Mathematics, History, Liberal Studies, Physics, Biology and Chemistry) are mainly taught in BrE [1]. Hence why BrE phonological elements are still found and prominent in modern day Hong Kong.

As the world enters the digital age where cultures are interconnected, English as a transnational lingua franca has shifted Hong Kong's attitude towards English positively. In addition, social media now, more than ever, is accessible to most Hong Kong people – 6.68 million users or 88% of the total population [2]. Reference [3] reported that American media dominates British media in Hong Kong. Most of the content viewed in Hong Kong are from American creators, according to the manager of Hong Kong's YouTube content partnership [4]. Statistics from the same report also revealed that among the 6.68 million users, 65% of them were daily YouTube users. Long-term exposure to the auditory medium of YouTube (American creators), to a degree, has deviated

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Hong Kong English users from BrE pronunciation. Thus, Hong Kong people may find themselves juggling British English and American English by the effect of American pop culture, such as drama series, songs, movies and so on.

This research studies the results of a group of 14 native Cantonese young adults (aged 18 – 25) whose first language (L1) is Cantonese. They were taught BrE (second language, L2) as implemented in Hong Kong's education system. With that in mind, this research sets out to find how a myriad of dialects and languages co-exist in the human mind. Which language is the dominant one? Though language transfer is always found from L1, it is predicted that AmE will show greater influence on participants' performance in English because AmE is more structurally and phonologically like BrE (a Germanic language), compared to Cantonese (a Sino-Tibetan language).

II. LITERATURE REVIEW

As a multilingual society, it is not uncommon to find people speaking all AmE, BrE and HKE in Hong Kong. Each of these variations carry their own distinct characteristics. The following section will focus on and illustrate the differences in phonology and attitudes between AmE, BrE and HKE:

A. American English

Given that Cantonese is a monosyllabic language, a prominent AmE feature like intervocalic flapping or tapping is unseen among native Cantonese speakers [5].

The presence of postvocalic [1] in AmE is a significant feature that sets it apart to other English varieties such as BrE and HKE. According to [5], 59% of the participants exhibited intervocalic flap, while almost all showed signs of postvocalic [1]. The participants unanimously agree that the strong influence of AmE displayed stems from the media which includes shows, films, pop music and even social media like YouTube.

Based on the lexical sets BATH, AmE and BrE speakers carry a $[\alpha]$ and $[\alpha]$ pronunciation, respectively. However, in HKE under the influence of Cantonese, BATH takes its form as $[\epsilon]$.

B. British English

A research based in Hong Kong on contextual English and Hong Kong English was done the to study the attitude of accents across the three varieties [3]. According to the results, most Hong Kong professionals favored a British accent, followed by American, Australian and Hong Kong accent across a range of contexts, such as teaching, news broadcast, business meeting, job interview, giving directions to native-speaking tourists, and chatting with non-native speaking friends. The participants of the above tasks were of 71

students of a part-time BA English program in local universities in Hong Kong. The data were collected by "verbal-guise technique supplemented by a written task". Chan stated that his finding was likely stemmed from its colonial history. It could be said that there is a certain bias or inclination towards BrE among working adults within Hong Kong.

C. Hong Kong English

Much linguistic research has been done on AmE and BrE, though less exploration has been done on HKE. Peng and Setter [6] was one of the earliest papers done on HKE, which briefly stated some phonological features of HKE, including the substitution of /n/ for initial /l/ and /w/ for /v/. Bolton and Kwok [7] explored the suprasegmental features of HKE based on instant spoken data. They noticed that the final consonants were sometimes dropped.

A more detailed paper on the phonological system of HKE based on a production task and a perception task was done with the data of fifteen first-year degree students [8]. It was found that native Cantonese speakers likely work with 7 vowel contrasts (without counting [ə]) to pronounce English words, rather than the full set of 11 among British RP speakers. The HKE vowel system lacks tense/non-tense and long/short distinction [8].

The above study also examined the simplification of consonant clusters among native Cantonese speakers. It was found that Cantonese speakers only utilize the four voiceless fricatives in the consonant system [6].

Voiced	Voiceless	
v, ð, z, 3	f. θ , s. $\langle \cdot, (h) \rangle$	

III. RESEARCH METHODOLOGY

This study analyzes the speech samples and questionnaire data from 14 local post-secondary students, whom are between the ages of 18 to 25.

In the first task, participants completed a questionnaire which consisted of 7 questions regarding the age group they belonged to, their education background, accent they adopt, and accent preference. Having questions on their education background ensured that the subject group have some degree of exposure to BrE growing up, and any disparities can be owed to American pop culture. Besides, having the questionnaire done first allowed us to understand the language background of the participants and their attitude towards each English variety. The first two questions inquired about the English variety that they thought they spoke and the variety that they prefer.

In the second task – the speaking test, participants did a video recording with their faces shown as they read 60 words. The video clips by participants offered a clearer and more accurate interpretation of the mouth movement when reading aloud. Due to the pandemic, all school lessons adopted online learning to maintain social distance between teachers and students. Therefore, instead of meeting participants in-person for an interview, Zoom was used as a communication platform in the second task. Among the 60 words, 40 words of them contained several features that are distinguishable between BrE and AmE (e.g., different in vowels, vowel length, and rhoticity). Words that have different pronunciations in BrE and AmE were also deliberately

chosen. The remaining 20 words were fillers.

The word list was set up based on the contrasts found between the three English varieties, as reported in several previous research studies about AmE features in Hong Kong [9–12] and features of HKE [8]. A total of 60 words were phonetically transcribed into IPA in BrE, AmE and HKE respectively with reference to [13]. All data ($60 \times N=14=840$ tokens) were analyzed one by one by two researchers, a native Cantonese speaker, and a native English speaker of American English.

IV. FINDINGS AND DISCUSSION

A. Questionnaire Results

All participants had the experience of receiving primary education and secondary education in Hong Kong, which suggested that they are all familiar with BrE and HKE.

A comparison between the answers of these two questions was made. As shown in fig. 1 below, 7 participants believed that they spoke with a British accent, while another 7 of them thought they carried a Hong Kong accent. None of the participants thought they had an American accent, which is also in line with our hypothesis – since all participants received education in BrE in Hong Kong. Interestingly, nearly 57% of participants (N=8) preferred speaking AmE. On the contrary, no votes were casted in favor of HKE, while 64% of participants (N=9) thought they spoke HKE.

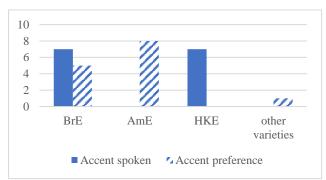


Fig. 1. A comparison between the accent spoken by participants and their preference.

Many of their choices were underpinned by social ties and stereotypes. Ultimately, the main reason for individuals that preferred AmE all comes down to their familiarity with it, i.e., high exposure. Terms such as "comfortable", "easy to speak", "easy to understand" and "norm" were associated with AmE. A remark that was noteworthy was the positive perception of the American entertainment industry, as one of them favored AmE to imitate their favorite American actresses and actors. On the contrary, participants that desired BrE associated it with greater class or status. Much of it were unconscious association to the British monarchy since words like "royal" and "proper" were used to describe BrE. At the same time, one participant, instead brought up their upbringing with BrE in the Hong Kong education system. Thereby, they considered it as the standard form.

B. Speech Samples

The 60 tokens were organized into 3 categories, 20 of them contained phonological features of AmE and the other 20 of

HKE (and the rest 20 are fillers). All participants produced BrE, AmE and HKE in various degree, as shown in table I below.

TABLE I: THE PERCENTAGE OF PARTICIPANTS PRODUCING 3 ENGLISH

	VARIETI	ES	
Percentage	Number of participants		
%	BrE	AmE	HKE
41-50	0	1	1
31-40	2	2	1
21-30	4	6	6
11-20	7	4	4
1-10	1	1	2
0	0	0	0

The highest percentage of production was found in HKE (50%), while all participants shared a certain degree of production in BrE, AmE and HKE, respectively. Table II below illustrates the percentage of producing BrE, AmE and HKE across 60 words.

TABLE II: THE PERCENTAGE OF PARTICIPANTS PRODUCING THREE ENGLISH VARIETIES (BRE, AME AND HKE) ACROSS THE 60 WORDS IN THE

	SAMPLES
English varieties	Percentage of production
BrE	29%
AmE	36%
HKE	35%

As shown in the table above, the percentages of each English variety production (BrE, AmE and HKE) were remarkably similar (approximately 30%). However, since all participants reported that they received education in Hong Kong and were taught BrE, it was hypothesized that a higher percentage of BrE would be found. With AmE scoring the highest in production, American pop culture such as drama series, songs and movies have influenced them, to an extent, into speaking AmE (L3).

1) Possible factors affected by AmE

Pertaining to linguistic variables in AmE, the *postvocalic* 'r' is the most salient feature. All participants produced postvocalic 'r' in two circumstances. First, it was found when the syllable at the end of a word contained an 'r'. For example, "church" can be pronounced as [tʃɜ:tʃ] in BrE or [tʃɜ:rtʃ] in AmE. In this task, 86% of participants (N=12) produced this word with postvocalic 'r', i.e. the AmE pronunciation. Other tokens include "target" ['tɑ:r.gɪt] (N=11, 79%), "purchase" ['pɜ:.tʃəs] (N=7, 50%), and "hamburger" ['hæmˌbɜ:.gə-] (N=6, 43%).

The other circumstance that made them produce postvocalic 'r' was words that end with 'r'. For instance, "letter" can be pronounced as ['letə] (BrE) or ['letər] (AmE), however 79% of participants (N=11) pronounced the AmE version. Other examples include "feature" ['fi:tʃər] (N=11, 79%), "beer" [bir] (N=10, 71%), "bear" [ber] (N=0, 71%), "car" [ka:r] (N=9, 64%), and "mother" ['mʌðər] (N=6, 43%).

Another well-known AmE feature – *intervocalic flapping*, however, is not commonly found among participants. The only tokens are "letter" ['letər] (N=1, 7%) and "mother" ['mxðər] (N=1, 7%).

Interestingly, for the words with different vowels in BrE and AmE, more participants produced the BrE versions, as shown in the table below.

TABLE III: THE PERCENTAGE OF PARTICIPANTS PRODUCING WORDS OF DIFFERENT VOWELS IN BRE AND AME

Token	IPA (BrE)	Production % in BrE (N=)	IPA (AmE)	Production % in AmE (N=)
glass	[gla:s]	86% (12)	[glæs]	14% (2)
fox	[fɒks]	86% (12)	[fa:ks]	14% (2)
box	[bɒks]	71% (10)	[ba:ks]	7% (1)
bath	[ba:θ]	64% (9)	[bæθ]	21% (3)
wall	[wo:1]	93% (13)	[wa:l]	87% (1)
task	[ta:sk]	57% (8)	[tæsk]	21% (3)
sure	[ʃɔː]	21% (3)	[ʃʊr]	79% (11)
wrong	[rɒŋ]	43% (6)	[ra:ŋ]	57% (8)

Additionally, participants pronounced some words with a shorter vowel, which is also a common feature found in AmE in contrast to BrE. For example only 1 participant pronounced "toothbrush" with a longer vowel as in ['tu: θ .bra \int] (BrE), but 4 pronounced it with a shorter vowel as in ['tu: θ .bra \int] (AmE). Equivalent results were drawn from "blue", which was produced with a longer vowel [blu:] by 7 participants and a shorter vowel [blu] by 6 participants.

For the words with completely different pronunciations in BrE and AmE, most of the participants produced the AmE versions. For example, in "schedule", all participants (N=14) produced the AmE version ['skedʒu:l] instead of the BrE one ['ʃedju:l]. Another example is "almond", which was pronounced as ['a:l.mənd] (AmE) by 13 participants, compared to the production of ['a:.mənd] (BrE) by only one participant.

Some participants also showed hypercorrection by adding an extra 'r' at the end of a syllable. For example, "Rebecca" [rəˈbekə] (BrE and AmE) was pronounced as [rəˈbekər] (N=6, 43%) and "spa" [spɑː] (BrE and AmE) as [spɑːr] (N=1, 7%). They were considered as wrong pronunciations.

2) Possible factors affected by HKE

In terms of HKE, several interesting observations were found.

a) Consonants

Reference [8] reported people producing voiced consonants with the voiceless counterparts. This is also found to be the most salient feature in the task. For example syllable-end consonant [z] in "cheese" [tʃi:z], "nose" [nəʊz] and "business" ['bɪz.nɪs] were produced as [s]; the [ʒ] in "television" ['tel.ɪ.vɪʒ.ən] was produced as [ʃ]; the [b] in "bell" [bel] and "bug" [bʌg] were produced as unaspirated [p].

More interesting observations were found on the fricatives. Since HKE has only 4 fricatives [8], compared to 8 in English, some participants produced the 'th' ($/\theta$ /) sound as [f], no matter if the 'th' is the initial or final consonant. "Thought" [θ :t], "cloth" [$klv\theta$] and "toothbrush" ['tu: θ .br λ [] became [fo:t], [$klv\theta$] and ['tu:f.br λ []. The voiced counterpart $/\delta$ /, as in "mother" [' $m\lambda$ 0/er)], was substituted by [d], becoming [' $m\lambda$ 0/er)].

Another observation was made on the '/au/' sound (for example in "bow" /bau/). Some words did not end with a 'w' in the spelling or in the IPA, but many participants produced /au /. This was prominent in words ending with 'ble' such as "preferable" ['pref.ər.ə.bəl] and "comparable" ['kpm.pər.ə.bəl]. They were read as ['pref.ər.ə.bau] and ['kpm.pər.ə.bau]. It was also commonly found in cases with words ending with a dark l, such as "bell" [bel], which was

pronounced as [be.av].

Another well-known feature of Cantonese is the 6 final consonants (including nasals /m/, /n/ and /ŋ/ and checked sounds /p/, /t/, /k/) [8]. This is a possible explanation as to why some participants dropped the final consonants since they do not exist in Cantonese. For example, "port", "red", "thought", "text", "bit", "bat", "exit" and "teapot".

The initial consonant, /r/, is not found in Cantonese too, and it was substituted by another existing consonant in Cantonese /w/, such as "red" [red] as [wed] (N=1) and "round" [roŋ] (BrE) as [woŋ] (N=2). When 'w' and 'r' merges, like in "wrong" [roŋ], one of the participants simply produced it as [woŋ] (like 'wong') (N=1).

Other mispronunciations were also found, which were idiosyncratic. For example, the consonant cluster 'bl' and 'fl' became 'br' and 'fr', such as "blue" /blu:/ and "fly" /flaɪ/. Their pronunciations were /bru:/ and /fraɪ/. One participant showed the above mispronunciation.

A simplification of consonant cluster was also seen in the word-final position. For example, "text" [tekst] was produced as [tes] (N=6, 43%). The final consonants [kst] were simplified as [s], probably since Cantonese only allows one final consonant like the CVC structure, while English allows a maximum of three final consonants, akin to the CCCVCCC structure. Other tokens include "box" ([boks] (BrE) or [ba:ks] (AmE)) which was read as [bbs] and "task" ([ta:sk] (BrE) or [tæsk] (AmE)) which was read as '[ta:s]' (N=3, 21%).

b) Vowel

The vowels 'a,e,i,o,u' carry multiple possible pronunciations. Remarkably, 5 participants have wrongly pronounced the vowel in the same way. For instance, the letter 'o' in "cloth" can be produced as $[klb\theta]$ (BrE) or $[kla:\theta]$ (AmE), but they pronounced this word as $[klb\theta]$ (and even $[klb\theta]$, as reported previously). Another example is "long" ($[lb\eta]$ (BrE) or $[la:\eta]$ (AmE)) which was pronounced as $[lb:\eta]$ by some participants. This [b]-[b] merger phenomenon was also mentioned in earlier literature [14].

c) Stress

Cantonese is known as a syllable-timed language, while English is stress-timed. Two pieces of findings were found concerning the placement of stress for multisyllabic words. First, some participants kept the same stress for all syllables. Examples include "feature", "target", "letter", "teapot", and "Rebecca". In other words, there is no syllable carrying the main stress. Second, stress was put on the second syllable of some multisyllable words. For example, the stress of "comparable" is on the first syllable, but 93% (N=13) of participants placed the stress on the second syllable. Other tokens include "triangle" (86%, N=12), "discount" (79%, N=11), "preferable" (71.4%, N=10), "hamburger" (50%, N=7), "exit" (50%, N=7) and "purchase" (43%, N=6). Many of these native Cantonese speakers put the stress on the second syllable, regardless of the number of syllables of the word or the syntactic category of the word. The reason behind this will be researched for future investigation.

V. CONCLUSION

Based on the speech samples, the practice of AmE and HKE have been heightened. As much as BrE is deeply

embedded as part of Hong Kong's history, it is evident that social networking has shifted the way people in Hong Kong speak English – greater use of AmE phonological features such as postvocalic 'r', intervocalic flapping and short vowel. On top of that, it has changed many young Hong Kong peoples' attitude towards AmE. Cantonese, which is the native language of all participants, has played a part in participants' English performance. Thus, many of their pronunciation belonged to neither AmE nor BrE. It can be concluded that AmE (L3) influences BrE (L2) since they are phonologically similar. On the contrary, although Cantonese (L1) is phonologically different from BrE (L2), still, features of Cantonese were also presented. The direction of language transfer is not always from the L1 to L2 but can be multi-directional.

APPENDIX

Appendix 1: Questionnaire

A study on Hong Kong young adults' English pronunciation and the influence of pop culture

Thank you for taking the time to participate in this questionnaire.

I am doing a research investigating English pronunciations of Native Cantonese speakers in Hong Kong. I am recruiting participants aging 16-60 to join.

Your data will be entirely confidentially and only for research purposes. The questionnaire will take about a total of 10 minutes (for 2 parts). You may leave the research study at any time.

A. Questionnaire

2. How old are you?

() British English

() Others

() American English

() Hong Kong English

() 16-25

1. What is your name? (For identification purposes)

	() 26-35 () 36-45 () 46 or above
3.	Did you receive primary education in Hong Kong? () Yes (Primary 1 to Primary 6) () Part of my primary education is done in Hong Kong
4.	Did you receive secondary education in Hong Kong? () Yes (Secondary 1 to Secondary 6) () Part of my secondary education is done in Hong Kong
5.	Which English variety do you speak? () British English () American English () Hong Kong English () Others
6.	Which English variety do you prefer the most?

7. What is the reason behind your choice in Question 6?

Appendix 2. Word list of the speaking test

- 1. Port
- 2. Glass
- 3. Feature
- 4. Nose
- 5. Thought
- 6. Ice
- 7. Sure
- 8. Text
- 9. Beer
- 10. Fox
- 11. Cloth
- 12. Target
- 13. Pie
- 14. Bear
- 15. Car
- 16. Letter
- 17. Bath
- 18. Long
- 10 Tasl-
- 19. Task
- 20. Bix
- 21. Cheese
- 22. Bit
- 23. Bat
- 24. Book
- 25. Blue
- 26. Toothbrush
- 27. Almond
- 28. Business
- 29. Comparable
- 30. Discount
- 31. Evening
- 32. Mother
- 33. Preferable
- 34. Purchase
- 35. Exit
- 36. Hamburger
- 37. Triangle
- 38. Bay
- 39. Fly
- 40. Toy
- 41. Cow
- 42. Television
- 43. Bell
- 44. Red
- 45. Plane
- 46. Teapot
- 47. Kiss
- 48. Wall
- 49. Coin
- 50. Bug
- 51. Spa
- 52. Leg53. Stress
- 54. About
- 55. Wrong
- 56. Tim
- 57. Round

- 58. Schedule
- 59. Church
- 60. Rebecca

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

Lau designed the word list, studied various academic papers, designed the research methodology, drafted the section as well as data analysis (speech samples) of this work, and finalized the paper; Ho designed the questionnaire and drafted this paper including the abstract, introduction, data analysis (questionnaire), conclusion and references; all authors had approved the final version.

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REFERENCES

- K. L. R. Chan, "Washback in English pronunciation in Hong Kong: Hong Kong English or British English?" in *Proc. CLaSIC*, 2018, pp. 10–13.
- [2] S. Kemp. (2022). "Digital 2022: Hong Kong" in DataReportal. [Online]. Available: https://datareportal.com/reports/digital-2022-hong-kong?rq=hong%20kong
- [3] J. Y. H. Chan, "Contextual variation and Hong Kong English" in World Englishes, vol. 32, pp. 54–74, 2013.
- [4] A. Woodhouse. (June 2015). YouTube racks up the hits with Hongkongers as views and uploads soar. South China Morning Post. [Online]. Available: https://www.scmp.com/news/hong-kong/education-community/article/1817527/youtube-racks-hits-hongkongers-both-terms-views
- [5] J. G. H. Edwards. (February 2016): Accent preferences and the use of American English features in Hong Kong: A preliminary study, Asian Englishes. [Online]. pp. 197–215. Available: https://www.tandfonline.com/doi/full/10.1080/13488678.2016.12254 82
- [6] L. Peng and J. Setter, "The emergence of systematicity in the English pronunciation of two Cantonese-speaking adults," *English Worldwide*, 2000, pp. 81–108.
- [7] K. Bolton and H. Kwok, "The dynamics of the Hong Kong accent: social identity and sociolinguistic description," *Journal of Asian Pacific Communication*, vol. 1, no. 1, pp. 147–172, 1990.
- [8] T. N. Hung, "Towards a phonology of Hong Kong English," World Englishes, vol. 19, issue 3, pp. 337–356, 2003.
- [9] J. C. Wells, Accents of English, Cambridge: Cambridge University Press, 1982.
- [10] U. Rindal, "Constructing identity with L2: Pronunciation and attitudes among Norwegian learners of English," *Journal of Sociolinguistics*, pp. 240–261, 2010.
- [11] Y.-Y. Tan, "To r or not to r: Social correlates of /1/ in Singapore English," *International Journal of the Sociology of Language*, pp. 1– 24, 2012.
- [12] Y.-Y. Tan, Communicating with Asia: Future of English as a Global Language, Cambridge: Cambridge University Press, 2016, pp. 120– 124
- [13] J. Daniel, Cambridge English Pronouncing Dictionary, Cambridge University Press, 2011.
- [14] D. Deterding, J. Wong, and A. Kirkpatrick, "The pronunciation of Hong Kong English," *English Worldwide*, pp. 148–175, 2008.

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