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Developing a Corpus-based Online Pronunciation Learning System for Cantonese Learners of Mandarin

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語言學及現代語言系
LINGUISTICS AND
MODERN LANGUAGE STUDIES

The Project - Aim

- To develop a corpus-based online pronunciation learning system for Mandarin teachers, learners and researchers
- To help users better understand the major problems in learning Mandarin pronunciation encountered by Hong Kong Cantonese learners

The Project - Motivation

- Hong Kong is a metropolitan city that serves as an international financial centre, which has given rise to multi-lingual characteristics in recent years.
- In addition to Cantonese and English which serve mostly as first and second languages, Hong Kong residents have increasingly started to develop a third or even a fourth language.
- Mandarin is encouraged by the Biliteracy and Trilingualism (两文三语) language policy.



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Mandarin Education in Hong Kong

- The education of Mandarin started in 1984 in Hong Kong school curriculum as an **elective subject** and became a **core subject** in primary and secondary school curricula in 1998 (Leung & Hui, 2011).
- The Hong Kong Examinations Authority (HKEA) included the Test of Proficiency in Putonghua as **public examination** (Tse et al., 1995).
- Exposure to Putonghua does **not** lead to a 'satisfactory advance in the levels of Putonghua proficiency' due to the fact that media and political debates and education are not supportive enough to the learning of Putonghua (Leung and Hui, 2011, p. 18).

Spoken Corpora

- It is believed that language in spoken form can be an effective guide to the basis of language learning than in written form (Chui & Lai, 2008).
- As information technology progresses, there is a growing interest in developing spoken corpora. A number of spoken corpora have been constructed for various research and pedagogical purposes.

Chinese Spoken Corpora

- The **National Chengchi University (NCCU) Corpus of Spoken Chinese** which established an online access to spoken Mandarin, spoken Hakka, and spoken Southern Min (Chui & Lai, 2008)
- The **Mandarin Conversational Dialogue Corpus (MCDC)** contains 30 sets of spontaneous dialogues in Mandarin
- The **Mandarin Map Task Corpus (MTCC)** involves 26 sets of dialogues that are orthographically transcribed
- The **Hong Kong Cantonese Adult Language Corpus (HKCAC)** contains both the orthographic and phonetic transcriptions of spoken Cantonese from the radio in late 1990s
- The **PolyU Corpus of Spoken Chinese** comprises of conversational exchanges in spoken Cantonese with 28 transcripts in early 2010s



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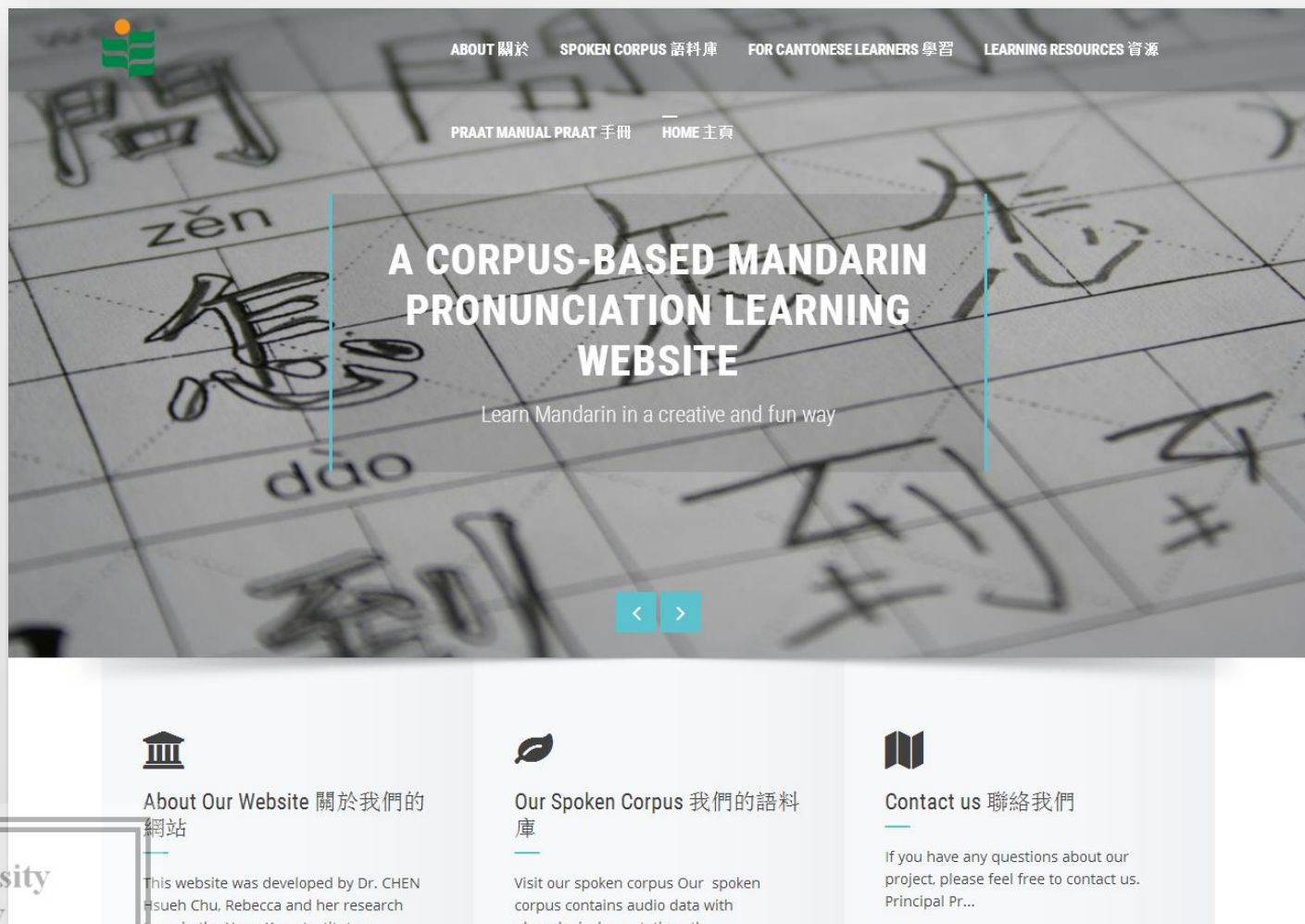
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Research Gap

1. Most of the Chinese spoken corpora simply compile speech data without annotation or analysis.
2. Researchers can use data from the corpora for research purpose, but it is difficult for learners of Chinese to learn from the corpora.
3. Teaching and learning resources of Chinese can be developed based on a corpus, to be useful for researchers, teachers, and learners.



Corpus-based Online Mandarin Pronunciation Learning System



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http://ec-concord.ied.edu.hk/Mandarin_Pronunciation/

Corpus-based Online Mandarin Pronunciation Learning System

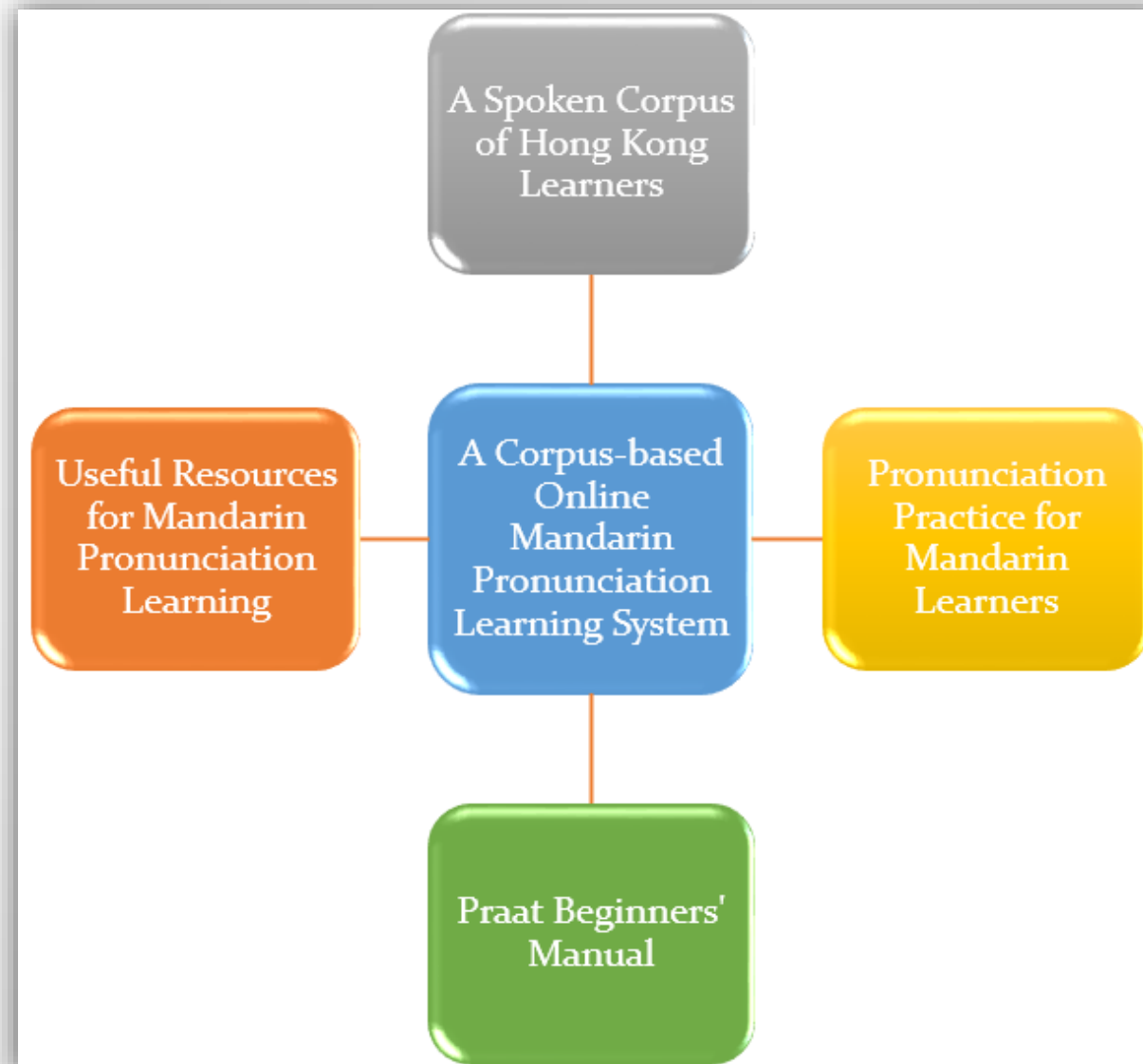


Corpus-based Online Mandarin Pronunciation Learning System

The learning system has been developed for learners to:

- practice segmental and suprasegmental aspects of Mandarin pronunciation through a variety of perception and production exercises
- discover the possible causes of common pronunciation features found in the corpus

Corpus-based Online Mandarin Pronunciation Learning System



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Our Spoken Corpus

ABOUT 關於 SPOKEN CORPUS 語料庫 FOR CANTONESE LEARNERS 學習 LEARNING RESOURCES 資源

PRAAT MANUAL PRAAT 手冊 HOME 主頁

OUR SPOKEN CORPUS 我們的語料庫

Search ...

OUR PAGES

- Our Spoken Corpus 我們的語料庫
- General Learning Resources 學習資源
- For Cantonese Learners 學習
- Our Praat Manual Praat手冊
- Recommended Learning Websites 學習網站
- English Pronunciation Learning Website 英文發音學習網站

1,038 Visits

[Visit our spoken corpus](#)

Our spoken corpus contains audio data with phonological annotations that focus on

Our Spoken Corpus - Characteristics

- It provides high-quality recordings that are ideally suited for phonetic and acoustic analysis by researchers around the world.
- It produces recordings and phonological annotations that are easily accessible and immediately available to all learners, teachers and researchers, both in and outside EdUHK.
- It provides a platform for learners to access and rate the corpus data in order to discover the linguistic features on their own and to enhance their active engagement in their own learning.
- It describes the distinctive linguistic features of Mandarin production of university students in Hong Kong.



Our Spoken Corpus

The spoken corpus contains:

- 8 hours recording data of Mandarin spoken tasks (reading of monosyllabic words, reading of multisyllabic words, reading of passage, and free speech) from university students in Hong Kong
- detailed phonological annotations of the recordings mainly focused on segmental features (vowels & consonants) and suprasegmental features (tone & retroflex finals)



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Our Spoken Corpus

Users can:

- browse the recordings by speakers' biographic information (e.g. gender, age, major)
- search the recordings by the pronunciation features they are interested in

Our Spoken Corpus - Browse



Online Mandarin Pronunciation Learning

A Spoken Corpus of the Mandarin of Hong Kong learners

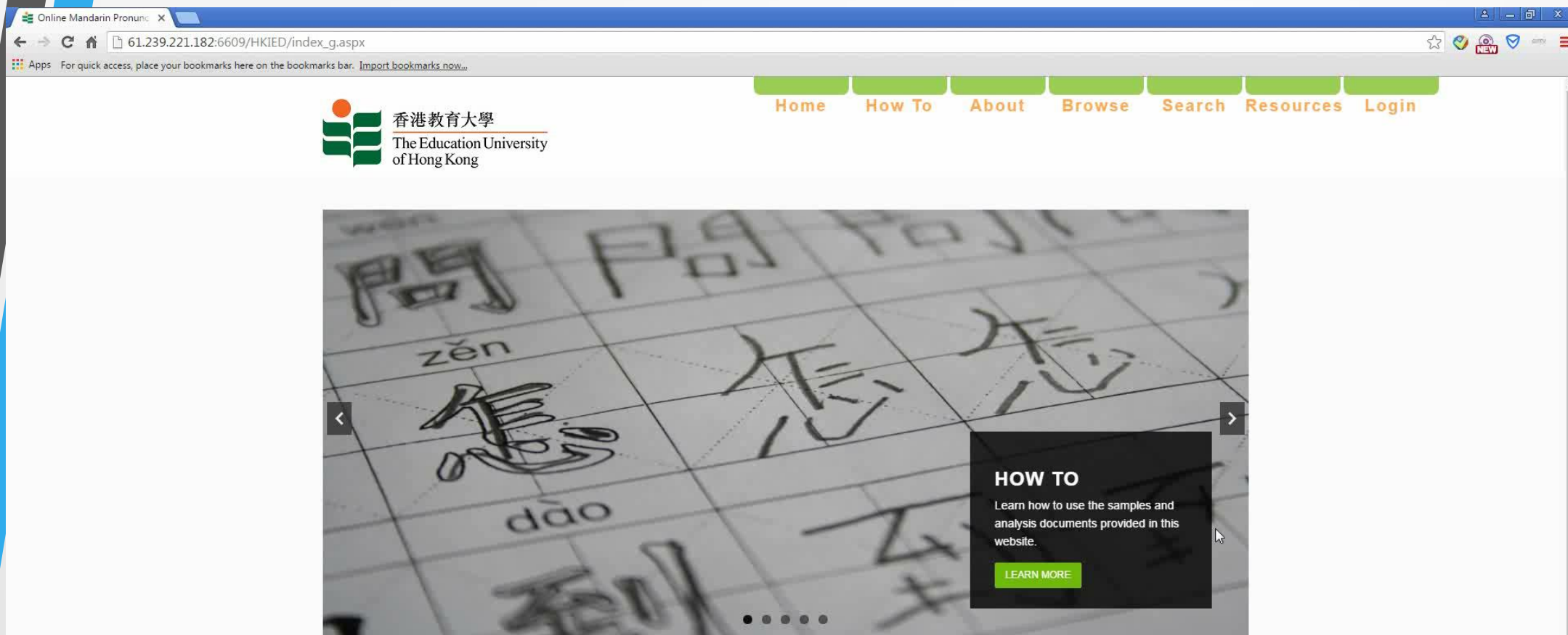


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Our Spoken Corpus - Search



Online Mandarin Pronunciation Learning

A Spoken Corpus of the Mandarin of Hong Kong learners



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Our Spoken Corpus – Spoken Tasks

- Task 1: Reading of monosyllabic words
- Task 2: Reading of multisyllabic words
- Task 3: Reading of passage
- Task 4: Free speech

Our Spoken Corpus – Spoken Tasks

Rationale

Task 1 - Reading of monosyllabic words

- Cover all tones
- Even distribution of the 4 tones
- Avoid polyphones
- Avoid overlapping with words in other tasks

Our Spoken Corpus – Spoken Tasks

Rationale

Task 2 - Reading of multisyllabic words

- Include confusing clusters (e.g. Tone₁+Tone₄, Tone₂+Tone₃ etc.)
- Include tone sandhi (e.g. Tone sandhi of Tone₃, 'yi', 'bu', and neutral tone)
- Include confusing vowels (e.g. nasal vs back nasal)

Our Spoken Corpus – Spoken Tasks

Rationale

Task 2 - Reading of multisyllabic words

- Word final 'r' vs 'er' syllable
- Include difficult consonants (e.g. retroflex consonants 'zh, ch, sh', nasal consonant 'n' etc.)
- Avoid polyphones
- Avoid overlapping with words in other tasks



Our Spoken Corpus – Spoken Tasks

Rationale

Task 3 - Reading of passage

- Collect comprehensive speech data that reveals speakers' pronunciation of vowels, consonants, tones, tone sandhi etc.

Our Spoken Corpus – Spoken Tasks

Rationale

Task 4 – Free Speech

- Speakers selected one topic from ‘My Studying Life’ and ‘An Unforgettable Trip’
- Collect authentic speech data of Mandarin for research concerning discourse, phonology, grammar, vocabulary etc.

Our Spoken Corpus – Spoken Tasks

- Task 1: Reading of monosyllabic words

Tasks 1&2 Word Reading

Speaker : 23
Gender : Female
Age : 21

Education Level :
Bachelor
Major : English

First Language :
Cantonese
Second Language :
English
Third Language :
Mandarin
Year of Mandarin
Learning : 10

Feature Color :

Markings in Red: Vowel

Features

Markings in Orange:

Consonant Features

Markings in Purple:

Suprasegmental Features

Markings in Green:

Mispronunciations

Remarks : Please read the below marking note for details.

Speaker's Record:  0:57  [Download](#)

Beijing Sample:  1:33  [Download](#)

Taiwan Sample:  0:57  [Download](#)

Marking Scheme of Reading Task 1

佳	牢	垮	勢	稀	恆
翁	爾	吼	憂	哲	氧
帥	徐	謊	罩	蹲	卓
軒	狼	阻	瀉	矯	吝
淙	胚	恩	凶	屏	慘
寺	竣	宰	嶽	罰	綴
淹	倍	勃	喚		



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Our Spoken Corpus – Spoken Tasks

- Task 1: Reading of monosyllabic words

佳 jiā→jiē	牢	垮 Incomplete Tone 3	勢	稀	恆
翁 wēng→vēng	爾 Incomplete Tone 3	吼 Incomplete Tone 3	憂	哲	氧 Incomplete Tone 3
帥	徐	謊 Incomplete Tone 3	罩	蹲	卓
軒 xuān→qiān xuān→qiān	狼 láng→lǎng	阻 zǔ→zhǔ Incomplete Tone 3	瀉 xiè→xiē	矯 Incomplete Tone 3	吝
淙 cóng→zòng	胚 pēi→bēi	恩	凶	屏	慘 Incomplete Tone 3
寺	竣	宰 Incomplete Tone 3	嶽 yuè→yè	罰 fá→fǎ	綴
淹	倍 bèi→bēi	勃	喚 huàn→hùn		

Our Spoken Corpus – Spoken Tasks

- Task 2: Reading of multisyllabic words

Speaker's Record:  0:48  [Download](#)

Beijing Sample:  1:05  [Download](#)

Taiwan Sample:  0:58  [Download](#)

Marking Scheme of Reading Task 2

不用	包括	徘徊	狹窄	狹窄	反省
踐踏	汛期	轉臉	瓦房	兒歌	耕耘
炎熱	沉著	提防	提防	圓圈兒	謙讓
遵守	遵守	挑戰	舒服	電影兒	性質
研究	等於	農村	概念	分水嶺	視網膜

海市蜃樓

Our Spoken Corpus – Spoken Tasks

- Task 2: Reading of multisyllabic words

Speaker's Record: 0:48 [Download](#)

Beijing Sample: 1:05 [Download](#)

Taiwan Sample: 0:58 [Download](#)

Marking Scheme of Reading Task 2


不用	包括	徘徊	狹窄 xiá→xié	狹窄 zhǎi→zǎi	反省 Incomplete Tone 3
踐踏	汛期	轉臉 Incomplete Tone 3	瓦房	兒歌	耕耘
炎熱 rè→rì	沉著 zhuó→zuó	提防 dī→tí	提防 fang→fáng	圓圈兒	謙讓 ràng→yàng
遵守 zūn→zhūn	遵守 shǒu→xǒu	挑戰	舒服	電影兒	性質
研究	等於 děng→děn	農村	概念	分水嶺 Incomplete Tone 3	視網膜
海市蜃樓 shèn→chún					

Our Spoken Corpus – Spoken Tasks

- Task 3: Reading of passage

Speaker's Record:  0:29 [Download](#)

Beijing Sample:  0:28 [Download](#)

Taiwan Sample:  0:33 [Download](#)

Marking Scheme of Reading Task 3

生活對於任何人都非易事。我們必須相信，我們對每一件事情都具有天賦的才能，並且無論付出任何代價，都要把這件事完成。當事情結束的時候，你要能問心無愧地說：“我已經盡我所能了。”

Speaker's Record:  1:03 [Download](#)

Beijing Sample:  0:41 [Download](#)

Taiwan Sample:  0:45 [Download](#)

Marking Scheme of Reading Task 3

有一年的春天，我因病被迫在家裏休息數周。我注視著我的女兒們所養的蠶正在結繭，這使我很感興趣。望著這些蠶執著地、勤奮地工作，我感到我和它們非常相似。像它們一樣，我總是耐心地把自己的努力集中在一個目標上。我之以如此，或許是因為有某種力量在鞭策著我——正如蠶被鞭策著去結繭一般。

Our Spoken Corpus – Spoken Tasks

- Task 3: Reading of passage

生活對於(yú→yū)任何人都非易事。我們必須相信，我們對每一件事情都具有天賦(fù→fú)的才(cái→chái)能，並且(Incomplete Tone 3)無論付出任何代價(jià→jiè)，都要把這件事完成。當事情結束(shù→sù)的時候(hou→hòu)，你要能問心無愧地說：“我已經盡我所(suǒ→shuǒ)能了。”

有一年的春天，我因病被迫在家裏休息(xi→xī)數周。我注視(shì→shī)著我的女兒們所養的蠶(cán→chán)正在結繭(Incomplete Tone 3)，這(zhe→zhe'r)使我很感興趣(qu→qù)。望著這些蠶(cán→jiǎn)執著地、勤奮地工作，我感到我和它們(men→mēn)非常相似。像它們一樣，我總是耐心(xīn→xīng)地把自己的努力集中(zhōng→zōng)在一個目標上(shang→shàng)。我之(zhī→zī)以如此，或(huò→huà)許是因為有某種力量在鞭策著(zhe→ze)我——正如蠶(cán→chán)被鞭策著去結繭一般。

Our Spoken Corpus – Spoken Tasks

- Task 4: Free Speech

Task 4 Free Speech

Speaker : 23
Gender : Female
Age : 21

Education Level :
Bachelor
Major : English

First Language :
Cantonese
Second Language :
English
Third Language :
Mandarin
Year of Mandarin Learning : 10

Speaker's Record:



[Download](#)

Topic: 我的學習生活


我的學習生活在小學的時候是非常的煩悶，因為小學的生活很簡單，老師都會為我們安排了一切。所以小時候的生活主要就是唸書，然後應付考試、測驗，等等。父母對我的要求也并不是很高，不像是現在那樣很多的怪獸父母都會要求自己的孩子去上什麼什麼補習班。我當時是非常自由，總是隨自己意願去做的。所以雖然煩悶，但是那些測驗、考試都是能應付得了的。最後就很成功地上了一所挺不錯的第一等級的中學。在中學上面，中學的學習生活比小學的步伐快很多，測驗的次數的...還有那個頻率都比小學來的高好幾倍，所以我在中學的學習生活都是在非常繁忙的考驗和測試中度過。學習生活之中我有遇到過幾個恩師，他們對我的...學科上面，讓某些學科上面的知識增長了不少。尤其是高中最後的一年，我遇上...發現在我身邊的老師其實都是...個寶貝。他們的學歷...他們的能力非常的高，教學的...質素非常的好，在他們的帶領下，我對...我從...我在那個...高中那個公開考試裡面就更好地掌握了。



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Our Spoken Corpus – Feature List

[ABOUT 關於](#) [SPOKEN CORPUS 語料庫](#) [FOR CANTONESE LEARNERS 學習](#) [LEARNING RESOURCES 資源](#)

[PRAAT MANUAL PRAAT 手冊](#) [HOME 主頁](#) [HIGH FREQUENCY FEATURE LIST](#)

HIGH FREQUENCY FEATURE LIST

High Frequency Feature List


category	feature	example	number
segmental			
vowel	a→ai	撒(sā→saǐ)	
	a→an	撒(sa↘→saŋ)	
	o→e	佛(fó→fé)	
	o→u	模(mó→mú)	
	o→ai	驚心動魄(pò→pǎi)	
	e→a	澤(zé→zá)	
	e→o	麼(me→mo)	
	e→i	恣(tè→tī)	
	i→e	繹(yì→yè)	
	u→ao	土(tuǎtaǒ)	
	u→uo	詛(zu↘→zuò)咒	
	ü→ui	徐(xú→suí)	
	an→ang	然(rán→ráng)	

OUR PAGES

[Our Spoken Corpus 我們的語料庫](#)[General Learning Resources 學習資源](#)[For Cantonese Learners 學習](#)[Our Praat Manual Praat手冊](#)[Recommended Learning Websites 學習網站](#)[English Pronunciation Learning Website 英文發音學習網站](#)

1,042

Visits





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Pronunciation Practice



ABOUT 關於

SPOKEN CORPUS 語料庫

FOR CANTONESE LEARNERS 學習

LEARNING RESOURCES 資源

PRAAT MANUAL PRAAT 手冊

HOME 主頁

HIGH FREQUENCY FEATURE LIST

PRONUNCIATION PRACTICE FOR HONG KONG SPEAKERS OF MANDARIN 華語發音練習

1. Tongue Twisters 繞口令

2. Songs 歌曲

3. Jokes 笑話

4. Quiz 測試

OUR PAGES

Our Spoken Corpus 我們的語料庫

General Learning Resources 學習資源

For Cantonese Learners 學習

Our Praat Manual Praat手冊

Recommended Learning Websites 學習網站

English Pronunciation Learning Website 英文發音學習網站



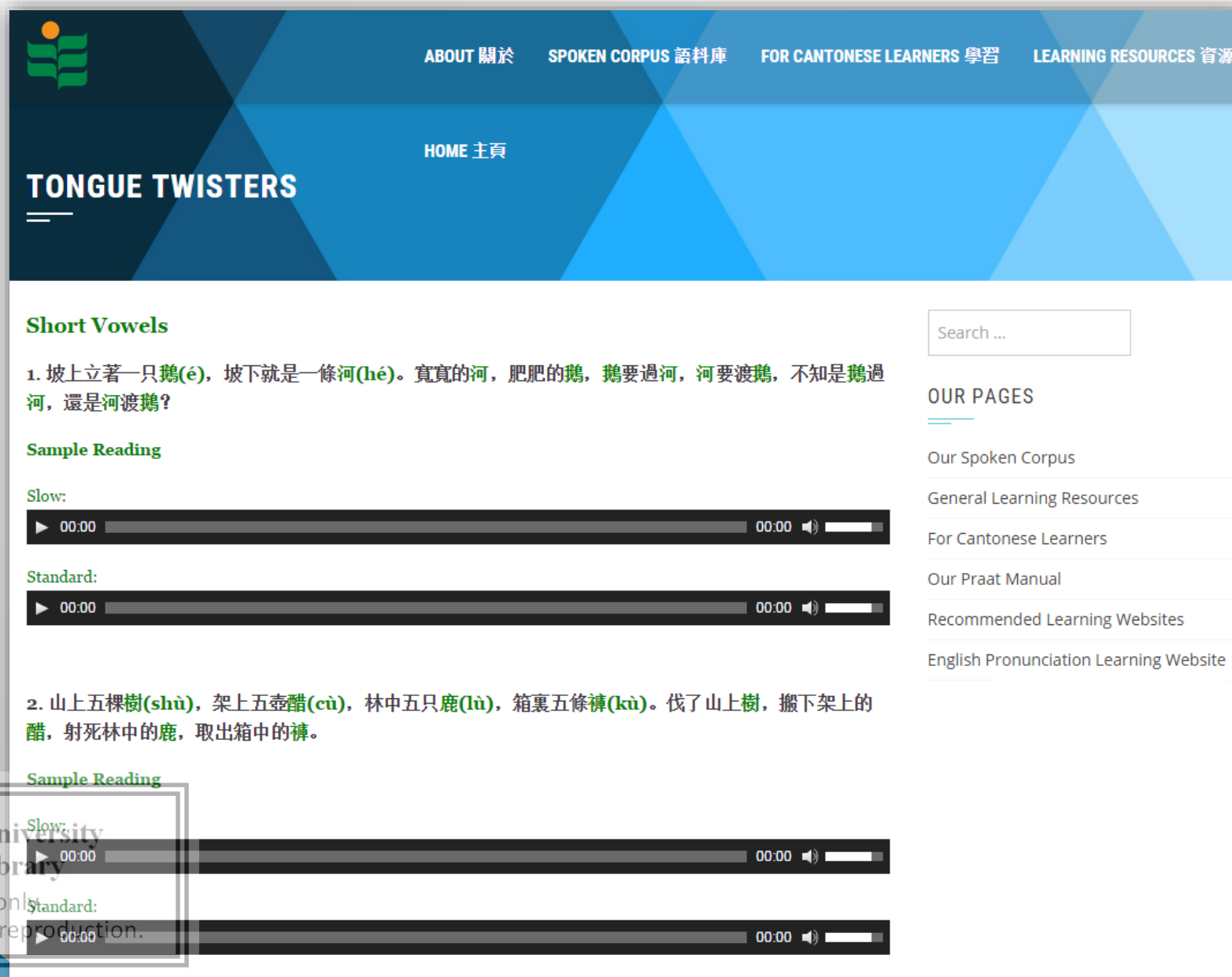
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1,043

Visits

Pronunciation Practice – Tongue Twisters



The screenshot shows a website for pronunciation practice. The header has a logo on the left and navigation links: ABOUT 關於, SPOKEN CORPUS 語料庫, FOR CANTONESE LEARNERS 學習, and LEARNING RESOURCES 資源. Below the header is a 'HOME 主頁' link and a 'TONGUE TWISTERS' title. The main content area features two tongue twister exercises. Each exercise includes a text paragraph with specific characters highlighted in green, a 'Sample Reading' section, and two audio player controls labeled 'Slow' and 'Standard'. The first exercise is '1. 坡上立著一只鵝(é), 坡下就是一條河(hé). 寬寬的河, 肥肥的鵝, 鵝要過河, 河要渡鵝, 不知是鵝過河, 還是河渡鵝?' and the second is '2. 山上五棵樹(shù), 架上五壺醋(cù), 林中五只鹿(lù), 箱裏五條褲(kù). 伐了山上樹, 搬下架上的醋, 射死林中的鹿, 取出箱中的褲.' The right sidebar contains a search bar and a list of 'OUR PAGES' including 'Our Spoken Corpus', 'General Learning Resources', 'For Cantonese Learners', 'Our Praat Manual', 'Recommended Learning Websites', and 'English Pronunciation Learning Website'.

ABOUT 關於 SPOKEN CORPUS 語料庫 FOR CANTONESE LEARNERS 學習 LEARNING RESOURCES 資源

HOME 主頁

TONGUE TWISTERS

Short Vowels

1. 坡上立著一只鵝(é), 坡下就是一條河(hé)。寬寬的河, 肥肥的鵝, 鵝要過河, 河要渡鵝, 不知是鵝過河, 還是河渡鵝?

Sample Reading

Slow: 00:00 00:00

Standard: 00:00 00:00

2. 山上五棵樹(shù), 架上五壺醋(cù), 林中五只鹿(lù), 箱裏五條褲(kù)。伐了山上樹, 搬下架上的醋, 射死林中的鹿, 取出箱中的褲。

Sample Reading

Slow: 00:00 00:00


Standard: 00:00 00:00

Search ...

OUR PAGES

- Our Spoken Corpus
- General Learning Resources
- For Cantonese Learners
- Our Praat Manual
- Recommended Learning Websites
- English Pronunciation Learning Website

Pronunciation Practice – Songs



ABOUT 關於 SPOKEN CORPUS 語料庫 FOR CANTONESE LEARNERS 學習 LEARNING RESOURCES 資源

PRAAT MANUAL HOME 主頁

SONGS

Song	Artist(s)	Focused Phoneme
七里香	周杰倫	(n, l)
Lydia	F.I.R	(sh, s) (sh, x)
不得不愛	潘瑋柏, 弦子	(s, c) (z, j) (j, zh)
千里之外	費玉清, 周杰倫	(y, r) (f, h)
菊花台	周杰倫	(w, f)
Super star	S.H.E	(w, m)
說愛妳	蔡依林	(g, k)
不能說的秘密	周傑倫	(w, m)
絲路	梁靜茹	(n, l)
今天妳要嫁給我	蔡依林&陶喆	(sh, x)

OUR PAGES

Our Spoken Corpus

General Learning Resources

For Cantonese Learners

Our Praat Manual

Recommended Learning Websites

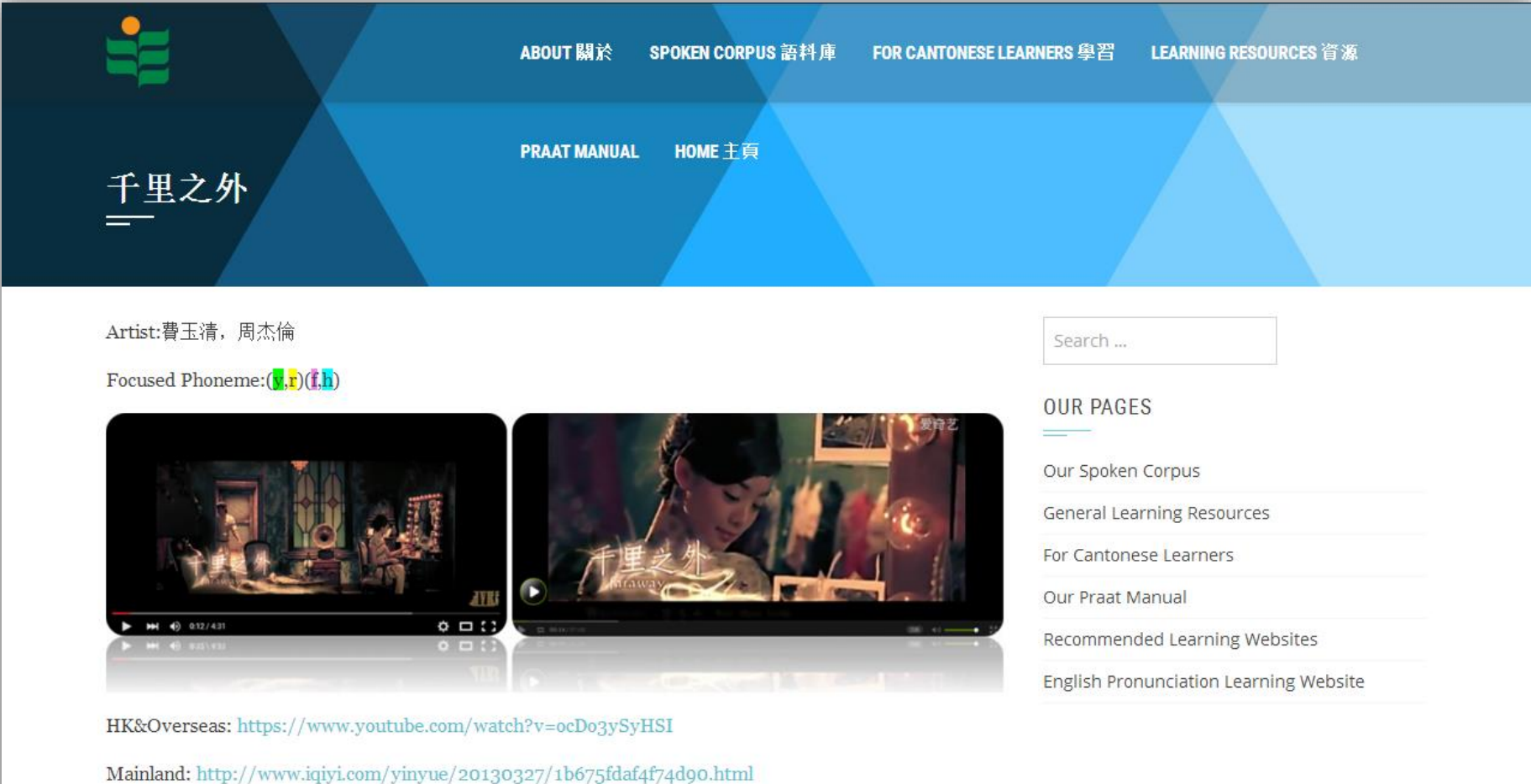
English Pronunciation Learning Website



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Pronunciation Practice – Songs



The screenshot shows the HKOL website interface. At the top, there is a navigation bar with links: ABOUT 關於, SPOKEN CORPUS 語料庫, FOR CANTONESE LEARNERS 學習, and LEARNING RESOURCES 資源. Below this, there is a section for the song '千里之外' (A Thousand Miles Away) by Artist: 費玉清, 周杰倫. The Focused Phoneme is listed as (r) and (f). There are two video players showing the song. Below the videos, there are links for HK&Overseas and Mainland. On the right side, there is a search bar and a list of 'OUR PAGES' including Our Spoken Corpus, General Learning Resources, For Cantonese Learners, Our Praat Manual, Recommended Learning Websites, and English Pronunciation Learning Website.

Artist: 費玉清, 周杰倫

Focused Phoneme: (r) (f)

千里之外

Search ...

OUR PAGES

- Our Spoken Corpus
- General Learning Resources
- For Cantonese Learners
- Our Praat Manual
- Recommended Learning Websites
- English Pronunciation Learning Website

HK&Overseas: <https://www.youtube.com/watch?v=ocDo3ySyHSI>

Mainland: <http://www.iqiyi.com/yinyue/20130327/1b675fdaf4f74d90.html>



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wū yán rú xuán wǎ fēng líng rú cāng hǎi

屋 簷 如 懸 瓦, 風 鈴 如 滄 海,

wǒ děng wàn guī lái

我 等 萬 歸 來

Pronunciation Practice – Jokes

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[PRAAT MANUAL](#) [HOME 主頁](#)

JOKES

1. 有一天，小明在家中看電視，媽媽說：“等一下你去沖個涼吧，用發(fā)灑”，小明不明白，問：“什麼是發灑？”，媽媽想了想說：“哦，我搞錯了，應該是花(huā)灑！”



2. 小明約了朋友見面，遲到了，他和朋友說：“不好意思，剛剛和媽媽吃了瓣！”朋友不解，問：“吃花瓣(bàn)？”小明意識到自己說錯了：“哦不是，是吃飯(fàn)！不要笑話我了哈哈！”



OUR PAGES

- [Our Spoken Corpus](#)
- [General Learning Resources](#)
- [For Cantonese Learners](#)
- [Our Praat Manual](#)
- [Recommended Learning Websites](#)
- [English Pronunciation Learning Website](#)




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Pronunciation Practice – Quiz

Online Exercise

Your Score : \$-

 Take Another Quiz

Consonant	Vowel	Tone	Mixed
\$100	\$100	\$100	\$100
\$200	\$200	\$200	\$200
\$300	\$300	\$300	\$300
\$400	\$400	\$400	\$400
\$500	\$500	\$500	\$500



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Pronunciation Practice – Quiz

CONSONANT \$100

Question: 請選擇你聽到的聲母（呼讀音）：



- ☐ j
- ☐ q
- ☐ x
- ☐ s

Check Answer



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Phonology Knowledge



1. General Introduction 概述

Mandarin Chinese, also called Standard Chinese, has been the official language of China for a few decades. It is commonly used in Chinese schools, communities, institutions and media. The Chinese language is actually a collection of various dialects that can be categorized into eight groups: Northern Chinese (Mandarin), Yueh (Cantonese), Wu, Kan, Northern Min, Southern Min, Hsiang, and Hakka (Chang, 2001). Though 70% of the Chinese population are native speakers of Northern Chinese, which is the basis of modern Standard Chinese, most of the Chinese people do not speak Mandarin accurately (Chang, 2001). According to a survey (Chinese Ministry of Education, 2004), only 10% of the Chinese population can speak Mandarin fluently and accurately.

普通話，也被稱做標準中文，已經在過去的幾十年裡一直是中國的官方語言。普通話在中國學校，社區，研究所和媒體中被廣泛運用著。中文其實是不同的方言的合集，這些方言可以被分成八類：北方中文（普通話），粵（粵語），吳，贛，閩北，閩南，湘，客（張，2001）。雖然中國人口的70%都是以北方中文為母語的，而北方中文又是現代標準中文的基礎，但是大部分的中國人不能講標準的普通話（張，2011）。據調查（中國教育局，2004），只有中國人口的10%可以講流利標準的普通話。

2. Pinyin System 拼音系統

Pinyin, literally meaning “spell out the sound”, is the Romanized phonetic transcription of the Chinese language. The system is now used in China to teach Chinese to students and internationally as a second language. Pinyin system bridges the gap between writing and speech in Chinese, and enables learners to derive the meanings of characters (Siok & Fletcher, 2001).

拼音，字面上的意思是“拼出讀音”，是用羅馬語音系統記錄的中文。在中國，這個系統現在用來教授學生中文並且在國際上被當作第二語言。拼音系統架起了中文寫作和會話的橋樑，同時讓學習者能夠明白漢字的意義（Siok & Fletcher, 2001）。

OUR PAGES

[Our Spoken Corpus 我們的語料庫](#)

[General Learning Resources 學習資源](#)

[For Cantonese Learners 學習](#)

[Our Praat Manual Praat手冊](#)

[Recommended Learning Websites 學習網站](#)

[English Pronunciation Learning Website 英文發音學習網站](#)

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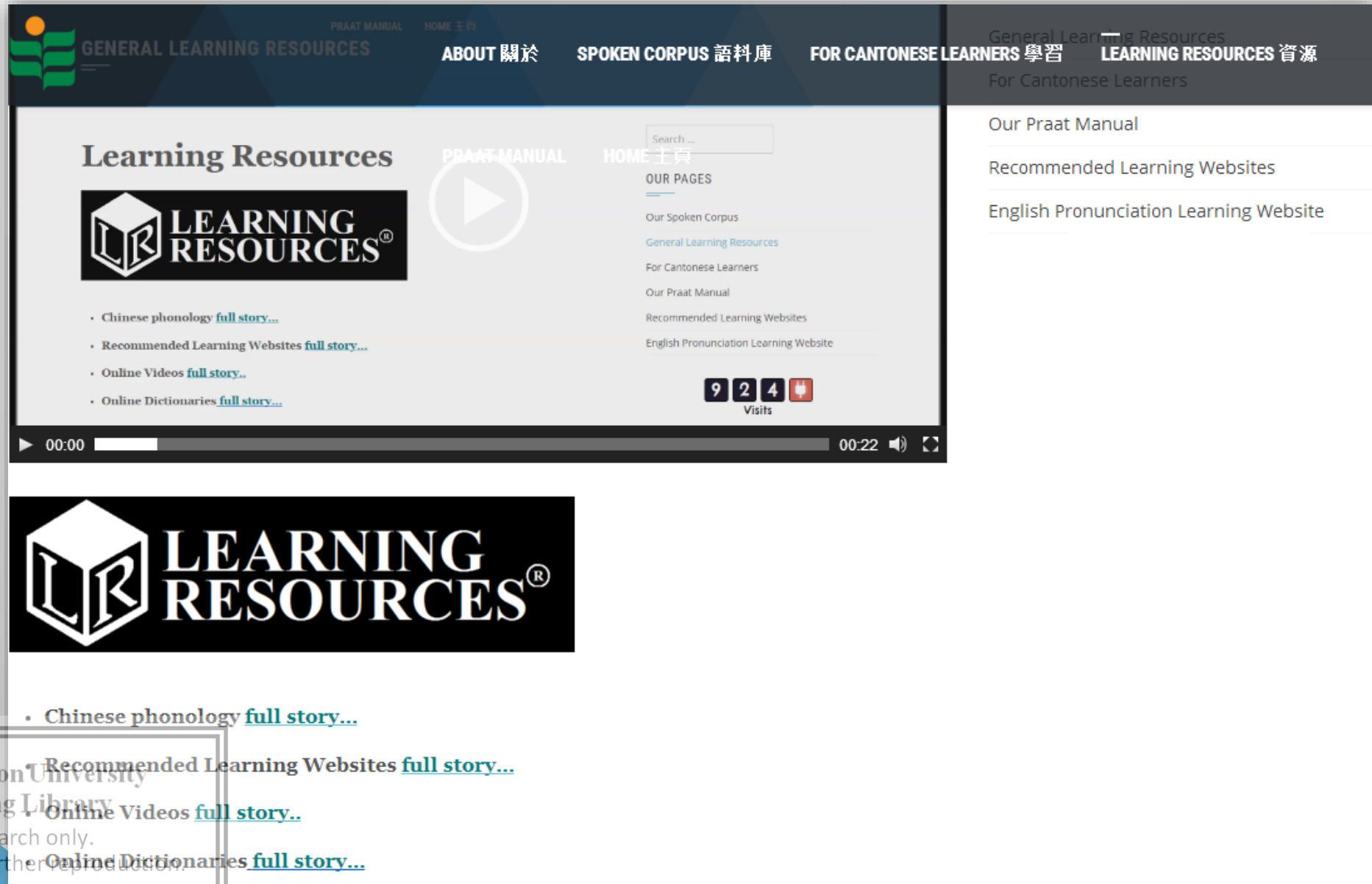
Visits

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Learning Resources



The screenshot displays the 'Learning Resources' website. The top navigation bar includes links for 'PRAAT MANUAL', 'HOME 主頁', 'ABOUT 關於', 'SPOKEN CORPUS 語料庫', 'FOR CANTONESE LEARNERS 學習', and 'LEARNING RESOURCES 資源'. The main content area features a video player with the 'LEARNING RESOURCES' logo and a list of resources: 'Chinese phonology full story...', 'Recommended Learning Websites full story...', 'Online Videos full story..', and 'Online Dictionaries full story...'. A sidebar on the right lists 'OUR PAGES' including 'Our Spoken Corpus', 'General Learning Resources', 'For Cantonese Learners', 'Our Praat Manual', 'Recommended Learning Websites', and 'English Pronunciation Learning Website'. A 'Visits' counter shows 924 visits. The bottom of the page features a large 'LEARNING RESOURCES' logo and a list of resources: 'Chinese phonology full story...', 'Recommended Learning Websites full story...', 'Online Videos full story..', and 'Online Dictionaries full story...'. A watermark for 'The Education University of Hong Kong Library' is visible in the bottom left corner.

GENERAL LEARNING RESOURCES

PRAAT MANUAL HOME 主頁

ABOUT 關於 SPOKEN CORPUS 語料庫 FOR CANTONESE LEARNERS 學習 LEARNING RESOURCES 資源

General Learning Resources For Cantonese Learners

Our Praat Manual

Recommended Learning Websites

English Pronunciation Learning Website

Learning Resources

LEARNING RESOURCES®

- Chinese phonology [full story...](#)
- Recommended Learning Websites [full story...](#)
- Online Videos [full story..](#)
- Online Dictionaries [full story...](#)

OUR PAGES

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924 Visits

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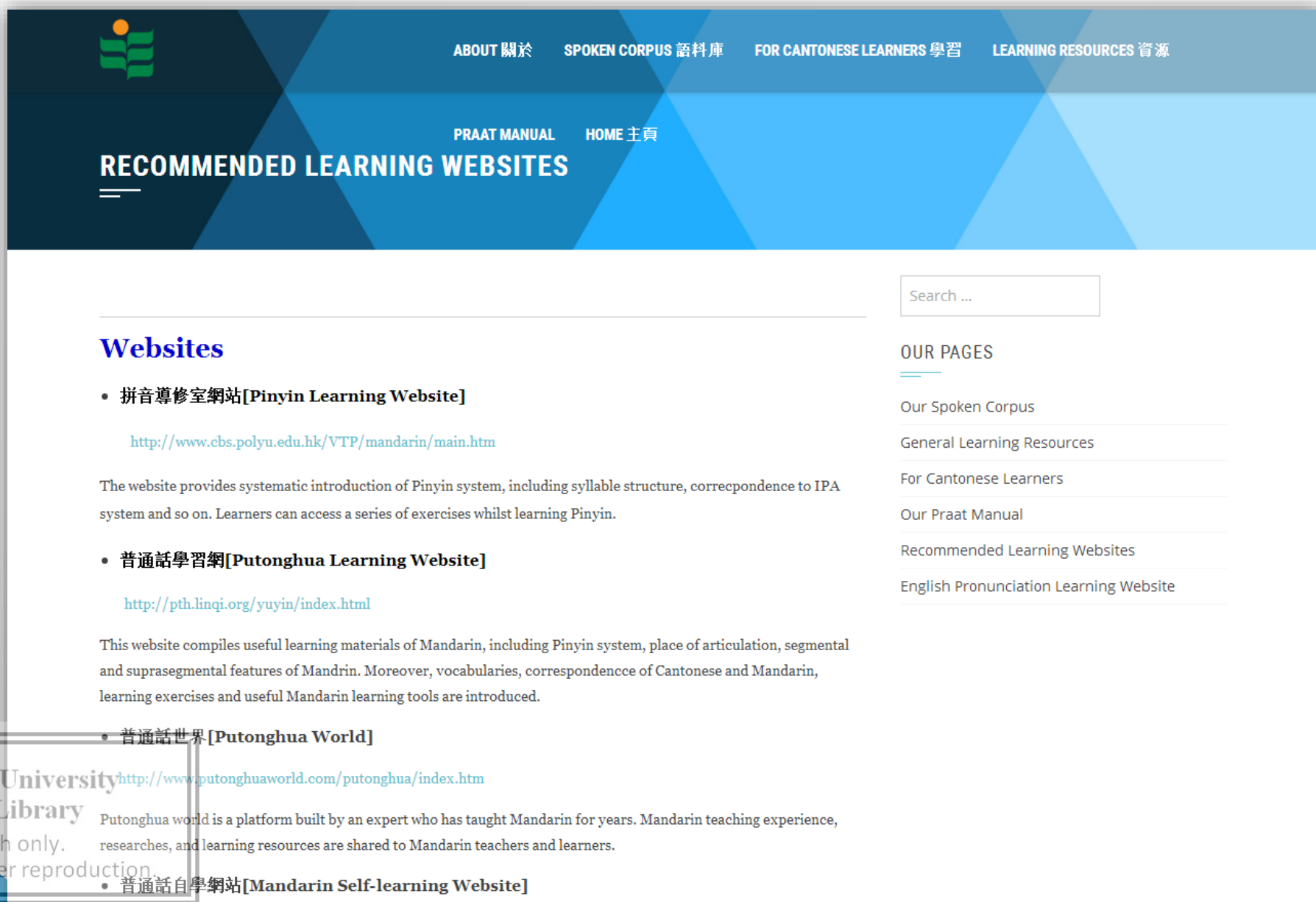
LEARNING RESOURCES®

- Chinese phonology [full story...](#)
- Recommended Learning Websites [full story...](#)
- Online Videos [full story..](#)
- Online Dictionaries [full story...](#)

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Learning Resources



The screenshot shows a website with a blue and white geometric background. At the top, there is a navigation bar with links: ABOUT 關於, SPOKEN CORPUS 語料庫, FOR CANTONESE LEARNERS 學習, and LEARNING RESOURCES 資源. Below this, there is a section titled 'RECOMMENDED LEARNING WEBSITES' with a sub-header 'PRAAT MANUAL HOME 主頁'. The main content area is divided into two columns. The left column lists three websites: Pinyin Learning Website, Putonghua Learning Website, and Putonghua World. The right column has a search bar and a list of pages: Our Spoken Corpus, General Learning Resources, For Cantonese Learners, Our Praat Manual, Recommended Learning Websites, and English Pronunciation Learning Website. A footer at the bottom left contains the logo of The Education University of Hong Kong Library and a disclaimer.

RECOMMENDED LEARNING WEBSITES


Websites

- 拼音導修室網站[Pinyin Learning Website]
<http://www.cbs.polyu.edu.hk/VTP/mandarin/main.htm>
The website provides systematic introduction of Pinyin system, including syllable structure, correspondence to IPA system and so on. Learners can access a series of exercises whilst learning Pinyin.
- 普通話學習網[Putonghua Learning Website]
<http://pth.linqi.org/yuyin/index.html>
This website compiles useful learning materials of Mandarin, including Pinyin system, place of articulation, segmental and suprasegmental features of Mandarin. Moreover, vocabularies, correspondence of Cantonese and Mandarin, learning exercises and useful Mandarin learning tools are introduced.
- 普通話世界[Putonghua World]
<http://www.putonghuaworld.com/putonghua/index.htm>
Putonghua world is a platform built by an expert who has taught Mandarin for years. Mandarin teaching experience, researches, and learning resources are shared to Mandarin teachers and learners.
- 普通話自學網站[Mandarin Self-learning Website]


Search ...

OUR PAGES

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- English Pronunciation Learning Website

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[PRAAT MANUAL](#) [HOME 主頁](#)


ONLINE VIDEOS

Videos in Chinese

1. Articulation of tones, j, q, x, n, l

<https://www.youtube.com/user/zeq160/videos>

These videos teach in detail how tones, and difficult sounds such as j, q, x, n, and l in Mandarin should be produced with help of model reading.



2. 50 common mistakes in speaking Mandarin

<https://www.youtube.com/watch?v=uKV8ta06PI4>

The video lists 50 common mistakes for Cantonese speakers in speaking Mandarin, with model reading.

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Praat Beginner's Manual



Praat Beginners' Manual



- **Chapter 1. Introduction: Acoustic Phonetics and Praat**
- **Chapter 2. Acoustic Analysis of Vowels**
- **Chapter 3. Acoustic Analysis of Consonants**
- **Chapter 4. Prosodic Analysis with Praat**
- **Chapter 5. Annotating Sound Files with Praat**

Suggested Answers

Online Resources

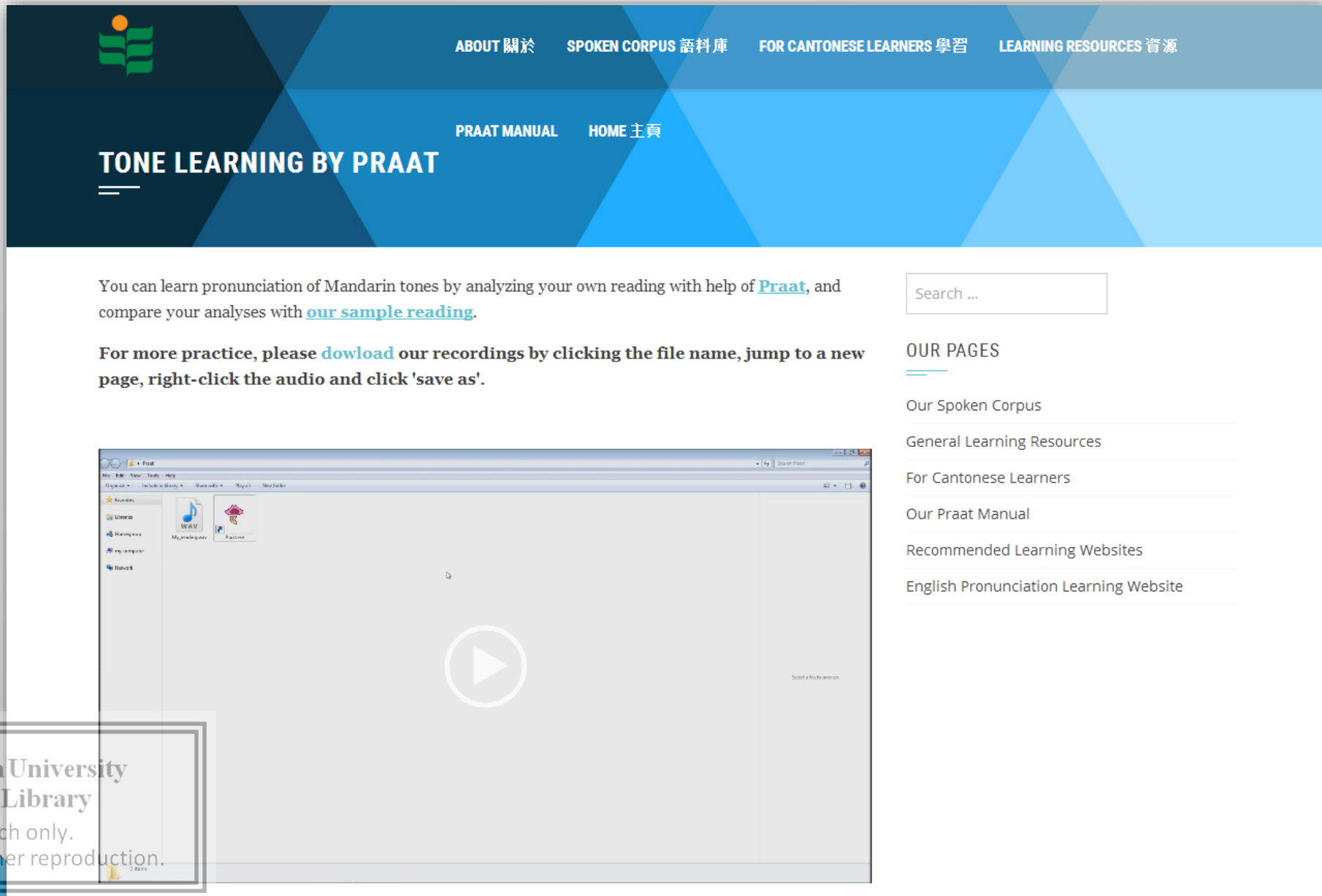
1. Other recommended Praat manuals
2. Extra exercises, tutorials, and self-tests
3. IPA resources: charts&fonts



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Tone Learning by Praat



ABOUT 關於 SPOKEN CORPUS 語料庫 FOR CANTONESE LEARNERS 學習 LEARNING RESOURCES 資源

PRAAT MANUAL HOME 主頁

TONE LEARNING BY PRAAT

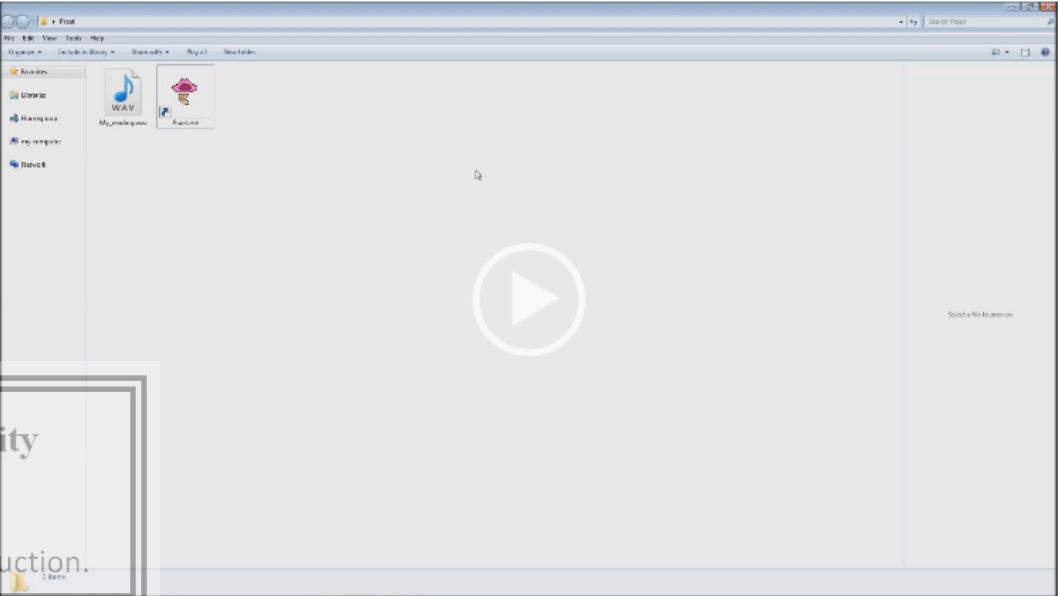
You can learn pronunciation of Mandarin tones by analyzing your own reading with help of [Praat](#), and compare your analyses with [our sample reading](#).

For more practice, please [download](#) our recordings by clicking the file name, jump to a new page, right-click the audio and click 'save as'.


Search ...

OUR PAGES

- Our Spoken Corpus
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Tone Learning by Praat

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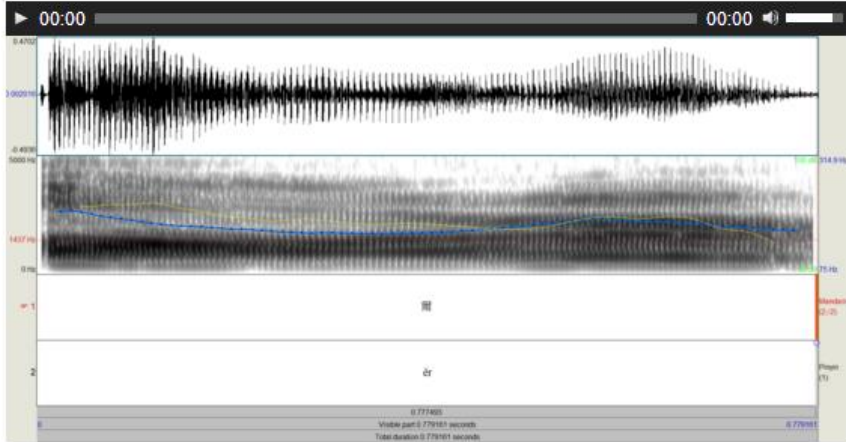
[LEARNING RESOURCES 資源](#) [PRAAT MANUAL](#) [HOME 主頁](#)

PRAAT – SAMPLE READING ANALYSES

You can compare your audio analyses in Praat with our sample reading analyses to correct your pronunciation of Mandarin tones.

[Monosyllabic word](#)

Beijing Sample




Mean Pitch (Blue Line): 171.8 Hz

Mean Intensity (Yellow Line): 74.2 dB

Duration: 0.779161s

Taiwan Sample



OUR PAGES


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[PRAAT MANUAL](#) [HOME 主頁](#)

DOWNLOAD AUDIO FOR PRAAT PRACTICE

Monosyllabic words

Sample Reading:
[tone1](#) [tone2](#) [tone3](#) [tone4](#)

Learner Reading:
[learner tone1](#) [learner tone2](#) [learner tone3](#) [learner tone4](#)

Multisyllabic words:

Sample Reading:
[Sample 1](#) [Sample 2](#) [Sample 3](#) [Sample 4](#)


Learner Reading:
[Learner 1](#) [Learner 2](#) [Learner 3](#) [Learner 4](#)

Sentences

Sample Reading:
[Sample 1](#) [Sample 2](#) [Sample 3](#) [Sample 4](#)

OUR PAGES

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