Errors Analysis in Hanyu Pinyin Pronunciation among the Undergraduates from Universiti Sains Malaysia (USM), Engineering Campus

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The Asian Conference on Language Learning 2013

Official Conference Proceedings 2013

Abstract

Mandarin is a tone language, which every Chinese word has a fixed tone. If a tone is changed, the meaning of the word will be changed. Thus, identifying the Hanyu Pinyin pronunciation mistakes is essential and should be prioritized by Mandarin instructors. Numerous pronunciation errors were identified among the undergraduates who were the non-native speakers with difficulties in pronunciation, communication and listening skills in Mandarin. Therefore, this study aims to investigate the pronunciation problems faced by the students as non-native speakers in consonants, vowels and tones based on the Hanyu Pinyin system. The findings of the study show consonant constitutes the highest number of errors (68.29%) as compared to the tone (13.66%) and vowel (18.5%). Among the consonants, most of the students committed errors in the pronunciation of "zh" as 16.43% while the second place goes to the consonant “z", which constitutes 13.57% of errors. The highest inaccuracy in vowel pronunciation happens to the last phoneme “s” as 82.14% while most students had made errors in the second tone as 56.76% and the third tone as 24.32%. Hence, it can be concluded that the undergraduates were suffering from mastering the Mandarin pronunciation, which had been greatly influenced by Malay language as their first language or mother tongue.

Keywords—Hanyu Pinyin, consonants, vowels, tones

INTRODUCTION

Mandarin is one of the oldest languages in the world. In the 21st century, mandarin has gained greater attention among the non-Chinese students. It has also become their favorite third language subject in Malaysia including the undergraduates from USM Engineering Campus. Nevertheless, the non-native speakers of Mandarin always encounter oral communication problem, particularly in pronunciation. Mandarin is a tonal language, which its phonetic system is different from Malay and English. Therefore, the listeners may encounter the problem in understanding accurately what the non-native Mandarin speakers' exact meanings. Thus, by identifying the errors in consonants, vowels, and tones found in the conversations among the non-native speakers, Mandarin instructors can devise their teaching strategies in helping students to master Mandarin pronunciation system easier and more effective.

PROBLEM STATEMENT

Undergraduates from USM Engineering Campus are required to register for the third language courses such as LAC 100, LAC 200 and LAC 300. However, the Mandarin phonetic system or Hanyu Pinyin varies from their first language, Malay, particularly in pronunciation system. Therefore, throughout the learning process of these Mandarin courses, the distinctive pronunciation system happened to the students bring communication difficulties in Mandarin. Since Mandarin is a tone language, which every word has a fixed tone, the non-native students are hard to learn and master Mandarin pronunciation effectively.

OBJECTIVE OF THE STUDY

Based on the problem statement highlighted earlier, this study aims to identify the errors in terms of consonants, vowels and tones in Mandarin faced by students in USM Engineering Campus. The analysis of Mandarin pronunciation errors is significant and should be prioritized by Mandarin instructors. Proper teaching strategies can be planned on how to teach Mandarin pronunciation effectively using Hanyu Pinyin in order to help the non-native speakers in mastering the right Mandarin pronunciation as well as increasing their interest and confidence in learning Mandarin.

LITERATURE REVIEW

Since Malaysia gained its independence in 1957, Malay language has been granted as the National language. In response to the fast economic growth of China, the Malaysian government has identified Mandarin as a foreign language required to be taught to Malaysian undergraduates (Hoe & Mah, 2011). Since the Mandarin-speaking population grows rapidly around the world, Mandarin become one of the most preferred foreign languages in Malaysian universities (Hoe & Mah, 2009). According to Hoe and Mah (2009) and Hoe and Mah (2011), below are the general descriptions of the Malaysian undergraduate students' language background:

1. Malay language is their first language or mother tongue;

2. Malay language is used as the medium of instruction in their primary and secondary schools;
3. English is learnt as a second language; and
4. They do not possess the background knowledge of Mandarin.

According to Shi (1992), the Mandarin pronunciation system is a point of cultural development of the language. He stresses that Hanyu Pinyin pronunciation is the most important element in learning Mandarin. Thus, the study of errors in Hanyu Pinyin pronunciation such as consonants, vowels, and tone is very important for Mandarin instructors to identify the problems faced by their students as non-native speakers. According to Zhao (2000), the main problem that prevents the non-native speakers to learn and master the accurate pronunciation is due to the difference of pronunciation system existing between their third and their first languages.

The four tones found in different Mandarin words are a difficult aspect to master by students who used to speak in their native language. If the tone is changed, the meaning of the word will be different. According to Wee (2002), in general, the existence of a variety in retroflex (zh, ch, sh, r) and alceolo-palatal (x) are among the varieties found in Hanyu Pinyin pronunciation system. Besides, Cheun, Hoe, and Ho (2005) have found that most students make a lot of mistakes in the affricate consonant (zh, ch, z, c, j, q). With respect to the vowel pronunciation, students commit the most mistakes in pronouncing the final phoneme, ü.

METHODOLOGY

30 undergraduates from semester 1, 2011/2012 session in USM Engineering Campus were involved in the study. All of them were non-native speakers of Mandarin who were randomly selected as the sample of the three Mandarin classes at different proficiency levels: LAC 100, LAC 200, and LAC 300. They consist of six different schools in USM, namely School of Chemical Sciences, School of Civil Engineering, School of Materials & Mineral Resources Engineering, School of Electrical & Electronic Engineering, School of Mechanical Engineering, and School of Aerospace Engineering. Out of the 30 selected samples, 15 students come from class LAC 100, nine students come from class LAC 200, and 6 students come from class LAC 300.

Researchers examined the students' pronunciation in a form of a Hanyu Pinyin table. The researchers recorded the students' reading in Hanyu Pinyin using the multimedia system available at the language lab 1 and language lab 2 in the School of Language, Literacy and Translation, USM. Then, a survey was conducted by distributing the questionnaires to the subjects. The discussion of findings from the data analysis were further supported by references obtained from extensive literature review including online and offline academic articles, journals and theses from bookstores, book fairs, as well as libraries of Universiti Sains Malaysia (USM) and University of Malaya (UM).

FINDINGS AND DISCUSSION

Errors in Mandarin Consonant Pronunciation (Initial Phoneme)

Analytical studies on Chinese consonant pronunciation mistakes as follows:

Consonant		**Frequency of Errors**	**Percentage of Overall**
Labial Consonant	b	1	0.71
	p	1	0.71
Alveolar Consonant	d	1	0.71
	t	1	0.71
Velar Consonant	g	2	1.43
	k	1	0.71
Palatal Consonants	j	6	4.29
	q	10	7.14
	x	8	5.72
Retroflex Consonant	zh	23	16.43
	ch	21	15
	sh	16	11.43
	r	4	2.86
Dental Sibilant Consonant	z	19	13.51
	c	16	11.43
	s	8	5.72
Typical Consonant	y	2	1.43
TOTAL		140	100

Table 1: Frequency and percentage errors in Mandarin consonants

Table 1 shows the highest number of mistakes committed by the LAC students is retroflex consonant "zh", which is 16.43% of the overall errors while the second highest is another retroflex consonant "ch" as many as 15%. This is followed by the error in pronouncing dental sibilant consonants “z", which has achieved 13.57%. The percentage of error for retroflex consonants "sh" and dental sibilant consonants "c" is same, namely 11.43%. The percentage of error for labial consonants "b" and "p", alveolar consonant "d" and "t", as well as the velar consonant "k" is same, namely 0.71%. The analysis also shows that students did not make any mistakes of labial consonants "m" and "f", alveolar consonants "n" and "l", velar consonant "h" and special consonant "w".

From the findings, it is apparent that most Malays made a lot of mistakes in pronouncing retroflex consonants. Malay students are found difficult to master the right expression of retroflex consonant and dental sibilant consonant due to the influence of their mother tongue, the Malay language. They were not able to acquire the aspirated consonants like "ch" and "c" due to the absence of this phonetic feature in Malay language. In addition, they are not familiar with the movement of the tongue and feel confused during the pronunciation of retroflex consonants such as "zh", "ch", "sh" and "r". Therefore, the mother tongue interference becomes the major factor of pronunciation errors in these specific types of Mandarin consonants.

Errors in Mandarin Vowel Pronunciation (Rear Phoneme)

Vowel	Frequency of Errors	Percentage of Overall Errors (%)
Final phoneme -u	5	17.86
Final phoneme -ü	23	82.14
TOTAL	28	100

Table 2: Frequency and percentage of errors in Mandarin vowels

Table 2 shows the students had committed the highest number of errors in pronouncing vowel "ü", that is as much as 82.15%. The second place goes to the vowel "u", which is 17.86%. The analysis shows that students did not make any error in the final phoneme "a", "o", "e" and "i". Most of the vowels in Malay and English languages are similar to Mandarin vowels except the "ü" which is unique to Mandarin pronunciation. Since Malay and English languages have no vowel "ü", this factor may lead to the confusion and the non-native speakers of Mandarin often mistakenly pronounce "ü" as "i" or "u".

Errors in Mandarin Tones

Tone	Frequency of Errors	Percentage of Overall Errors (%)
First	2	5.41
Second	21	56.76
Third	9	24.32
Fourth	5	13.51
TOTAL	37	100

Table 3: Frequency and percentage of errors in Mandarin tones

Mandarin is a tone language. Pronunciation errors caused by Mandarin tone can be divided into four categories: the first tone, the second tone, the third tone, and the fourth tone. By referring to Table 3, the students faced the problem in pronouncing the second tone, which has reached 56.76% of the total errors. This can be the evidence of the great challenge in Mandarin tone mastery, which they usually find it the most difficult and confusing. The second highest number of errors is the third tone, which is 24.32%. This is followed by the fourth tone as 13.51% and the first tone as 5.41%.

From the survey conducted in the classroom, most students thought they had problem to learn Mandarin. They were confused to distinguish the second tone with the third tone, sometimes include the neutral tone. These findings indicate Malay students often utter Mandarin words in the second tone because for them the second tone sounds relatively similar like the third tone. When they speak Mandarin in faster speed, the pronunciation becomes unclear and not smooth. Besides, the subjects also stated that it was very hard for them to lower down and rise up the tones in their utterances. Some students found themselves difficult to identify the pronunciation of certain words such as qíng and qǐng. The students' feedback is significantly supported by the error analysis which lack of students were found facing the problem in pronouncing the first tone. As overall, the findings of this study show most of the

undergraduate students have made a lot of mistakes in Mandarin tone and consonants as compared to vowels. The ratio of Mandarin pronunciation errors in percentage among the consonant, vowel, and tone is 68.29: 13.66: 18.05.

CONCLUSION

Mandarin as the oldest and the most spoken languages in the world, has gained its momentous status and priority in foreign language learning. Though Mandarin has gained greater attention among the non-Chinese undergraduates in USM Engineering Campus, they are always encountering oral communication problem by making a lot of pronunciation errors. Due to the Mandarin phonetic system is different from the learners' first language, the results of the study show the students who are non-native speakers of Mandarin were very difficult to master the pronunciation due to their mother tongue interference. Consonant constitutes the highest number of errors (68.29%) as compared to the tone (13.66%) and vowel (18.5%). Therefore, Mandarin pronunciation errors should be investigated from time to time as they become those errors will demotivate the students to learn and master the language and distort the effective Mandarin communication among the others across the globe. Therefore, research on the factors contributing to these pronunciation errors as well as the effective teaching strategies of Mandarin pronunciation are recommended as the further study.

ACKNOWLEDGENT

Gek Suan Khor would like to extend her deepest gratitude to Research Creativity and Management Office (RCMO) of Universiti Sains Malaysia (USM) for the support rendered in presenting this research paper in the Third Annual Asian Conference on Language Learning held from April 25-28 2013, at the Ramada Osaka, Osaka, Japan.

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APPENDIX

SOAL SELIDIK

MASALAH DAN STRATEGI PENGAJARAN ASPEK SEBUTAN BAHASA CINA DALAM KALANGAN PELAJAR KAMPUS KEJURUTERAAN, UNIVERSITI SAINS MALAYSIA (USM).

Kepada pelajar-pelajar LAC 100, LAC 200 dan LAC 300.

Sila menjawab soalan yang berikut, kerjasama anda amat dihargai.

SOALAN I: Mengenai dengan Hanyu Pinyin

a) Terdapat 23 konsonan dalam Hanyu Pinyin, yang mana satu sebutan konsonan yang paling sukar bagi anda? Sila bulati konsonan-konsonan tersebut.

b	p	m	f
d	t	n	l
g	k	h	
j	q	x	
zh	ch	sh	r
z	c	s	
y	w		

Mengapa?

_____

_____

b) Terdapat 6 vokal tunggal iaitu a,o,e,i,u, ű, yang mana satu sebutan vokal tunggal yang paling sukar? Sila bulati vokal-vokal tersebut.

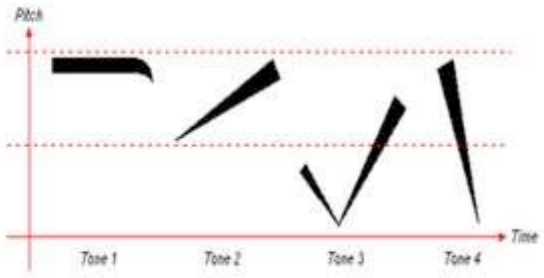
a , o , e , i , u , ű

Mengapa?

Selain daripada vokal tunggal, yang mana satu sebutan vokal majmuk paling sukar bagi anda? Contoh: ao, ou.

c) Terdapat 4 nada dalam Hanyu Pinyin, yang mana satu nada yang paling sukar bagi anda?

	Nada pertama
	Nada kedua
	Nada ketiga
	Nada keempat



Mengapa?

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