

การพัฒนาแบบฝึกการออกเสียงวรรณยุกต์ภาษาไทย: กรณีศึกษานักศึกษาชาวจีน มหาวิทยาลัยราชภัฏนครราชสีมา

กนิษฐา พุทธิเสถียร

โปรแกรมวิชาภาษาไทย คณะมนุษยศาสตร์และสังคมศาสตร์

มหาวิทยาลัยราชภัฏนครราชสีมา

บทคัดย่อ

งานวิจัยนี้วัตถุประสงค์เพื่อ ศึกษาและพัฒนาแบบฝึกการออกเสียงวรรณยุกต์ภาษาไทย ศึกษาจากนักศึกษาชาวจีนที่เรียนในมหาวิทยาลัยราชภัฏนครราชสีมา จังหวัดนครราชสีมา ประเทศไทย จำนวน 15 คน ศึกษาโดยการบันทึกเสียงของนักศึกษาชาวจีน ด้วยโปรแกรม Cool Edit Pro บันทึกภาพ VDO ประกอบ และวิเคราะห์คลื่นเสียง ด้วยโปรแกรม Praat รายการคำศัพท์เป็นคำคู่เทียบเสียงวรรณยุกต์จำนวน 45 คำ ประกอบไปด้วย 5 หน่วยเสียงวรรณยุกต์ คือ สามัญ เอก โท ตรี และจัตวา ซึ่งในการวิเคราะห์จะแบ่งเป็น 3 ขั้นตอน ในขั้นตอนที่ 1 ให้นักศึกษาชาวจีนออกเสียงคำทดสอบ จากนั้นบันทึกเสียงและวิเคราะห์เสียงโดยใช้โปรแกรม Praat ขั้นตอนที่ 2 ออกแบบแบบฝึกหัดการออกเสียงวรรณยุกต์ภาษาไทย จากนั้นให้นักศึกษาชาวจีนเรียนรู้และฝึกฝน โดยใช้แบบฝึกหัดดังกล่าวนี้และในขั้นตอนสุดท้ายให้นักศึกษาออกเสียงคำทดสอบอีกครั้ง วิเคราะห์คลื่นเสียงวรรณยุกต์เพื่อเปรียบเทียบความแตกต่างระหว่างก่อนและหลังการฝึกฝนจากแบบฝึกหัด ข้อค้นพบที่ได้คือ การออกเสียงวรรณยุกต์ภาษาไทยของนักศึกษาชาวจีนมีการพัฒนาขึ้นจากการใช้แบบฝึกหัดและมีการออกเสียงวรรณยุกต์เสียงเอกเพี้ยนมากที่สุดอย่างมีนัยสำคัญทางสถิติ

คำสำคัญ ; วรรณยุกต์ภาษาไทย, แบบฝึกการออกเสียงวรรณยุกต์ภาษาไทย, ภาษาไทย สำหรับชาวต่างประเทศ

The Development of Thai Tonal Pronunciation Exercise: A Case Study of Chinese Students, NRRU

Kanitha Putthasatien

Thai Program, The Faculty of Humanities and Social Sciences,

Nakhon Ratchasima Rajabhat University, Thailand

Abstract

The main objectives are to study and to develop Thai tonal pronunciation exercise: a case study of Chinese students in Nakhon Ratchasima Rajabhat University, Thailand. The data were recorded from 15 Chinese students studying in Nakhon Ratchasima Rajabhat University (NRRU) by using the Cool Edit Pro Program and a VDO-recording device. They were given a list containing 45 words, each of which contains 5 tonal minimal pairs: Mid, Low, Falling, High, and Rising tones. The investigation was carried out in three main stages. In the first step, Praat program was utilized to collect tones pronounced by the students where they have not yet been trained by the method proposed. Next, the method was then designed, developed, and given to them to practice. The students were allowed a week time to train themselves with the method. The last step involves having the students to pronounce the same list of words once again, using Praat. All the tones recorded from both first and third steps are then compared using Wave-Form analysis. It has been found out that while other tones have noticeably improved, the Low tone appears to be the one mostly incorrectly pronounced.

Keywords ; Thai Tone, Thai Tonal Pronunciation Exercise, Thai for Foreigners

Introduction

The researcher is a lecturer in Thai Program, the faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University (NRRU), Thailand, and has been teaching Thai to foreign teachers and students who had come to study and work at NRRU. In the academic year 2014, NRRU has signed a Memorandum of Understanding (MOU) agreement with Yuxi Normal University, Yunnan, China. Accordingly, there have been 15 Chinese students coming to study at Thai Program at NRRU and had taken a course entitled ‘Linguistics Approach to Thai Language’. As the lecturer is responsible for this particular topic, the researcher noticed that all of them clearly had problems with pronouncing Thai tones. This is where the idea of creating a method aimed to help them with the Thai-tone pronunciation began.

The purposes of research

To study, develop, and propose a Thai tonal pronunciation exercise originally designed for a specific group of Chinese students; those studying in Nakhon Ratchasima Rajabhat University, Thailand.

The scope of research

The number of Chinese students participated and involved in this study is 15, all of which are studying in Nakhon Ratchasima Rajabhat University (NRRU), Thailand. The recording devices used for the whole experiment are Cool Edit Pro Program and a VDO recorder where all the tones gathered were then analyzed by Praat. A total of 45 words with 5 tonal minimal pairs: Mid Tone, Low Tone, Falling Tone, High Tone, and Rising Tone, were selected.

Methodology

1. Sample

There are 15 4th-year female Chinese students (formerly studied Thai for 2 years in Yuxi Normal University, Yunnan, People's Republic of China (PRC)) currently on studying in Thai program, The Faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University, Thailand in the academic year 2015 and the sample is these students.

2. Test Words

The test words in this study were taken from 45 long vowels with open syllables from 5 tonal minimal pairs: mid, low, falling, high, and rising tones. The test words are those with manner of articulation; affricates, fricatives, nasals, laterals, and approximant. In some cases, more suitable words were replaced by closed syllable. The detail can be seen in Appendix.

Data analysis

The investigation was carried out in 3 main stages. In the first step, the students, referred to as 'the informants' herein, were given a list of 45 words to naturally pronounce. All tones they produced at this stage were recorded and named as 'pre-test'. After this step, the investigator designed a method aiming to help them pronounce better. The process started with the investigator lecturing them how to use the method and they were allowed approximately a week time to practice on their own at home before coming back for the test, tones recorded at this stage is named as 'post-test'. In the process of sound analysis, there are three main sets of data: 1) individual pre- and post-score comparison, 2) pre- and post-score comparison by wordlist, and 3) pre- and post-score comparison by tones. The validity of the score measurements was tested by using percentage and T-test (with $p < 0.05$). The results were shown in the following figures.

Results

The 1st main part of the results indicates that the accuracy of pronounced tones obtained from the post-test scores is clearly higher than that of the pre-test. As can be seen from Figure 1, prior to the method, the 1st and 13th were found to mispronounce the most with only approximately 25 correct words out of 45 words or only about 55.56 %. On the other hand, the 9th informant had the highest pre-test score of 30 points, accounting for 66.67%.

For the post-test scores, it has been found out that the 1st informant had the lowest score of 34 points, accounting for 75.56%. The 7th, 8th and 9th had the highest score of 40 points which is approximately accounting for 88.89%.

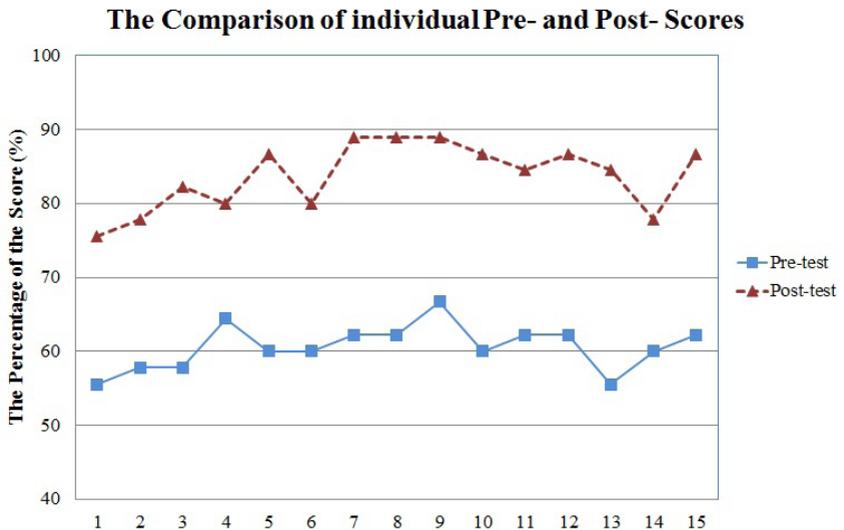


Figure 1 : The Comparison of Individual Pre- and Post- Scores.

The 2nd main part of the results indicates that there are words which none of the students correctly pronounced and they include /thàat/, /khàa khǐŋ/, /chàa cháaw/ /háa hǎy/, /khá náa/, /bít làa/, /láa lǎŋ/, /wáa wèe/, and /yàa ráaŋ/. On the other hand, there are also words which all of them can pronounce correctly, after following the exercise proposed. They are / thāa sǐi/, /tháa thāay/, /thāa wōŋ/, /khāa cāy/, /kháa khaay/, /khāa khěen/, /cháa nāan/, /síp hāa/, /hāa rǐi/, /pāy māa/, /nāa khāaw/ /līi lāa/, /dāa lāa/, /wí? wāa/, /wāa klāaw/, /kĭn yāa/, and /yāa yāay/, as shown in Table 1.

Table 1 : The Comparison of Wordlist Pre- and Post- Scores.

No.	Wordlist	Pre-Test		Post - Test	
		Scores	%	Scores	%
1	/thāa sǐi/	15	100.00	15	100.00
2	/thàat/	0	0.00	6	40.00
3	/thāa náam/	2	13.33	15	100.00
4	/tháa thāay/	15	100.00	15	100.00
5	/thāa wōŋ/	15	100.00	15	100.00
6	/khāa cāy/	15	100.00	15	100.00
7	/khàa khǐŋ/	0	0.00	9	60.00
8	/khāa sàt/	12	80.00	12	80.00
9	/kháa khaay/	15	100.00	15	100.00
10	/khāa khěen/	15	100.00	15	100.00
11	/chāa yēn/	10	66.67	15	100.00
12	/chàa cháaw/	0	0.00	7	46.67

No.	Wordlist	Pre-Test		Post - Test	
		Scores	%	Scores	%
13	/cha cha ch̄aa/	1	6.67	2	13.33
14	/cháa n̄aan/	15	100.00	15	100.00
15	/ʔit cháa/	15	100.00	15	100.00
16	/h̄ee h̄aa/	15	100.00	15	100.00
17	/r̄ook hàa/	4	26.67	15	100.00
18	/s̄ip hàa/	15	100.00	15	100.00
19	/háa h̄ay/	0	0.00	7	46.67
20	/h̄aa r̄h̄/	15	100.00	15	100.00
21	/p̄ay m̄aa/	15	100.00	15	100.00
22	/pr̄a màa/	3	20.00	9	60.00
23	/m̄aa màa/	14	93.33	15	100.00
24	/r̄ót máa/	2	13.33	3	20.00
25	/maa hàw/	13	86.67	15	100.00
26	/n̄aa kh̄aaw/	15	100.00	15	100.00
27	/n̄óoy n̄aa/	15	100.00	15	100.00
28	/n̄aa rák/	12	80.00	15	100.00
29	/kh̄á n̄aa/	0	0.00	13	86.67
30	/n̄àk n̄aa/	8	53.33	15	100.00
31	/l̄i l̄aa/	15	100.00	15	100.00
32	/bit làa/	0	0.00	8	53.33

No.	Wordlist	Pre-Test		Post - Test	
		Scores	%	Scores	%
33	/lāa sàt/	12	80.00	14	93.33
34	/lāa lǎŋ/	0	0.00	15	100.00
35	/dāa lǎa/	15	100.00	15	100.00
36	/wí? wāa/	15	100.00	15	100.00
37	/ʔà rāy wàa/	3	20.00	9	60.00
38	/wāa klàaw/	15	100.00	15	100.00
39	/wāa wèe/	0	0.00	5	33.33
40	/yǐ wǎa/	6	40.00	15	100.00
41	/kīn yāa/	15	100.00	15	100.00
42	/yàa ráaŋ/	0	0.00	8	53.33
43	/yāa yāay/	15	100.00	15	100.00
44	/rá? yāa/	1	6.67	3	20.00
45	/pān yāa/	6	40.00	15	100.00

The 3rd main part of the results indicates that the Low tone is the tone which most of them seemed not to be perfectly and correctly pronounced whereas the Mid Tone and Rising Tone are 100% correctly pronounced (see Figure 2).

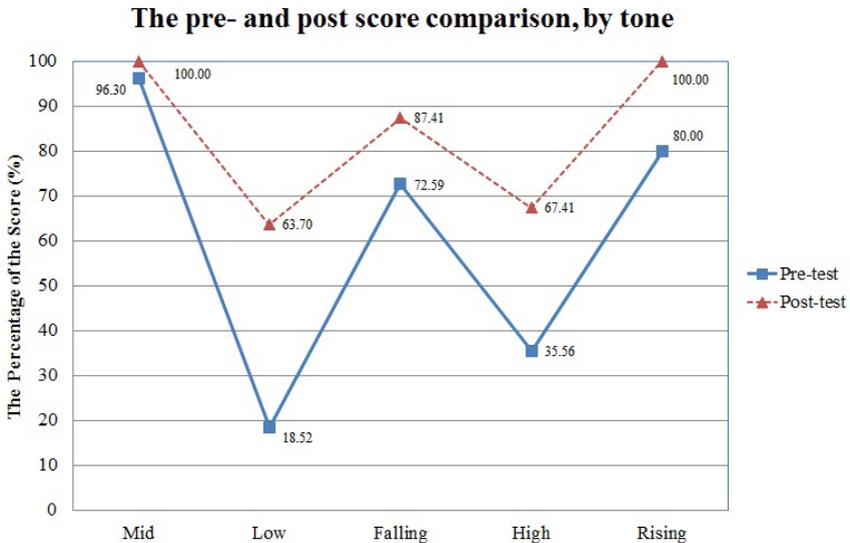


Figure 2 : The pre- and post- scores comparison, by tones.

Conclusion and discussion

From the whole investigation, there are now 3 parts of main findings concluded as follows;

1. As seen in Figure 1, the students with the lowest pre-test scores have similar characters including; not speak-up as much, not participating in conversation with Thais as much. The reason for this may have been the lack of ability to correctly pronounce.

2. The reason why the Low tone remains the most difficult tone for them to pronounce can be attributed to the fact that Chinese tonal system does not contain Low tone, as specified by Yi Ling, W. (2012). Nevertheless, with using this proposed exercise, it has been found that they all can pronounce much more accurately. It then has been suspected that they might have been further improved if they had more time to practice (i.e. longer than a week).

3. As Thai contains tones, meaning that mispronouncing one tone may result in a different meanings of word, even if a foreigner mispronounces one tone incorrectly, they can still make sense by the surrounding context.

4. The results obtained from this study can be used in the process of teaching Thai language to foreigners as well as the development of Thai speaking practice exercise. This is to help them pronounce as perfectly to the native speakers as possible.

Appendix

		Tones				
		Mid	Low	Falling	High	Rising
						
Affricates	/th/	/thāa sīi/ ทาสี 'to paint'	/thàat/ ถาด 'tray'	/thāa náam/ ท่าน้ำ 'wharf'	/thāa thāay/ ท้าทาย 'to defy'	/thāa wōon/ ถาวร 'permanent'
	/kh/	/khāa cāy/ คาใจ 'be doubtful'	/khāa khīŋ/ ข่าขิง 'galangal'	/khāa sàt/ ฆ่าสัตว์ 'butcher/valuable'	/khāa khaay/ ค้าขาย 'trade'	/khāa khāyēn/ ขาแขน 'leg and arm'
Fricatives	/ch/	/chāa yēn/ ชาเย็น 'iced tea'	/chāa chāaw/ ฉาวฉาว 'scandalous'	/cha cha chāa/ ชะชะช้า 'cha cha cha'	/chāa nāan/ ช้านาน 'for a long time'	/chit chāa/ อิจฉา 'be jealous'
	/h/	/hāe hāa/ เฮฮา 'be merry'	/rōok hàa/ โรคห่า 'plague'	/sip hāa/ สิบห้า 'fifteen'	/hāa hāy/ ฮ่าฮัย 'choral sound'	/hāa hē/ หาหรือ 'to consult'

Nasals	/m/	/pāy māa/ ไปมา 'back and forth'	/prà maa/ ประหม่า 'feel bashful'	/ māa maa/ มาม่า 'noodle'	/rót maa/ รถม้า 'carriage'	/maa háw/ หมาเห่า 'barking dogs'
	/n/	/nāa khāaw/ นาข้าว 'rice field'	/nóoy nàa/ น้อยหน้า 'custard apple'	/nāa rák/ น่ารัก 'lovely/face'	/khá náa/ คะน้า 'Chinese kale'	/nàk nāa/ หนักหนา 'extremely'
Laterals	/l/	/lī lāa/ ลีลา 'style'	/bit làa/ บิตหล้า 'gimlet'	/lāa sàt/ ล่าสัตว์ 'to hunt'	/lāa lǎŋ/ ล่าหลัง 'fall behind'	/dāa lāa/ ดาหลา 'a kind of flower'
Approxi- mant	/w/	/wí? wāa/ วิวาห์ 'to marry'	/?à rāy wàa/ อะไรหว่า 'what'	/wāa klàaw/ ว่ากล่าว 'to blame'	/wāa wèe/ ว่าเหว่ 'feel lonely'	/yī wǎa/ ยี่หวา 'beloved'
	/y/	/kīn yāa/ กินยา 'take some medicines'	/yàa ráaŋ/ หย่าร้าง/ 'to divorce'	/yāa yāay/ ยายาย 'grandmother'	/rá? yáa/ ระช้ำ 'hang'	/pān yāa/ ปั้นหยา 'hip roof'

Figure 3 : 45 wordlist of 5 tonal minimal pairs

Acknowledgements

I would like to thank the Faculty of Humanities and Social Sciences, Nakhon Ratchasima Rajabhat University for funding this research project. Moreover, without the cooperation of all Chinese students, this research would not have been possible.

References

- Abramson, Arthur S. (1962). The vowels and tones of Standard Thai: Acoustical measurements and experiments. **International Journal of American Linguistics**. 28(2), 1–146.
- Naksakun, K. (2013). **Thai Sound System (ระบบเสียงภาษาไทย)**. Bangkok: Faculty of Arts, Chulalongkorn University. (In Thai)
- Putthasatien, K. (2016). **Fundamental Thai – Chinese Sound System (ระบบเสียงภาษาไทย – ภาษาจีนกลางเบื้องต้น)**. Nakhon Ratchasima Rajabhat University. (In Thai)
- Yi Ling, W. (2012). **Error analysis of Thai pronunciation: A case study of Chinese students speaking Mandarin and Cantonese as the mother tongue. (การวิเคราะห์ข้อผิดพลาดการออกเสียงภาษาไทย: กรณีศึกษานักศึกษาจีนที่ใช้ภาษาจีนกลางและภาษาจีนกวางตุ้งเป็นภาษาแม่)**. Chiang Mai University. (In Thai)
- Helen H. Shen, Chen – Hui Tsai and Yonong Zhou. (2006). **Introduction to Standard Chinese Pinyin System. A Chinese Textbook from Overseas Perspectives**. Beijing Language and Culture University Press.