A Perspective on Suprasegmental Features of Non-native Student English Teachers: Evidence from Sichuan, China

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Keywords: Suprasegmental features, non-native student English teachers, Recorded readings.

Abstract. This study analysed recorded readings of two passages from 70 non-native student English teachers in a college from Sichuan, China. Based on the analysis, the author found there were quite a few suprasegmental features of non-native student English teachers in China, which are not always shared by non-English majors. Although the participants in the study can not compete with the English majors in prestigious universities and not learn English as efficiently, they still aim to be English teachers. How to prepare them to become qualified teachers is a challenging task. Thus, the study also can provide support for pedagogy of assessing and training spoken English for some poor English learners, or the ones from underdeveloped areas.

Introduction
In China, there has been considerable discussion about “Silent English”, a long troublesome problem for English teachers as well as the learners. There is no exception for English majors, including student English teachers. It is even more serious in underdeveloped areas, such as Sichuan, Gansu, Ningxia, etc. In Sichuan, the learners usually start to learn English between the ages of 6-8 years old and sometimes even at an earlier age. However, due to geographical and language restrictions, they can not be immersed fully into authentic language situations, except in their English classes. Therefore, if the teachers can strive to create an English-rich atmosphere in class, where learners are exposed to high quality language environment in various forms, they will definitely engage and benefit more. Thus, to prepare adequately to ensure this quality of learning takes place, the would-be English teachers need to spend more time on their spoken English than other English majors. Most of learners do exert themselves to correct their pronunciation of segmental features—vowels and consonants, via dictionaries. However, “in phonetics and phonology, any speech may be divided into two: segmental and suprasegmental”[1]. Suprasegmental features have long been denied by the learners due to their subtleness.

Literature Review
Clark and Yallop [2] harbored the idea that “Features of spoken language which are not easily identified as discrete segments are variously referred to as prosodic features, non-segmental features or suprasegmentals”. The terms imply a difference between segmental sounds (traditionally consonants and vowels), which are commonly thought of as entities, and features such as pitch and tempo which are likely to be perceived as features extending over longer stretches of speech.
Ladeforged and Johnson [1] invented the definition of suprasegmental features as “those aspects of speech that involve more than single consonants or vowels.” He claimed that the principal suprasegmental features are stress, length, tone, and intonation, which are independent of the categories required for describing segmental features (vowels and consonants).
Much of the research [3, 4, 5, 6] has examined the phonological features of EFL learners, with an exclusive focus on the segmental features. Only a few researchers [7, 8, 9, 10, 11] have attempted to explore the suprasegmental features of EFL learners.
Xie and Ma [7] compared the rhythmic patterns between Chinese students and native speakers, and concluded that there are differences of their “sound changes” in the stream of speech such as linking, weak form, elision, etc. Masaki [8] took the attitude that in terms of tonicity, Japanese EFL
learners tend to place the nucleus on the last word in each word group, regardless of the context, failing to deaccent old information, which quite resembles Chinese language. As Bodorík [9] has shown, among the English phonological features, the most troublesome problem for Slovak learners is the incorrect placement of stress. Learners have the tendency to follow the stress pattern in their mother tongue and therefore when applying it, the whole appropriate pronunciation effect is corrupted. Hu [10] analysed the aesthetic attributes of English pronunciation and intonation, including the beauty of sonority, rhyme, rhythm, intonation, and succession. Accordingly, she advised how to raise EFL learners’ aesthetic consciousness and creation of English pronunciation. Ma [12] investigated the influence of phonetic transfer on Chinese female EFL learners’ stress manifestation in connected speech. Through her findings, she discovered that Chinese female EFL learners struggled to give a strong performance on stress manifestation. Furthermore, her research showed that there is no significant difference on stress manifestation between English and Chinese by Chinese female EFL learners, which indicates the possible existence of phonetic negative transfer.

Previous studies of phonetic features emphasized non-English majors. Seldom studies have been put into surprasegmental features of English majors, student English teachers in China.

**Study**

The participants were 70 students, majoring in English education, in the foreign languages department of a college in Sichuan, China. The students were from 2 classes, including 66 (94.3%) female and 4 (5.7%) male. 68 of them were from Sichuan province, 2 from Chongqing, historically a part of Sichuan province, similar to Sichuan in language and culture. Their Gaokao English scores range from 87 to 135 out of 150, except for the two who did not attend the exam. All participants were in their second year of study. The college offers three-year teacher training courses together with a half-year practicum for these students. After graduation, the students in the department aim to teach English in kindergartens, primary and secondary schools, or some training schools. As part of the study the learners were informed to send the recorded file, which included two texts, one consisting of 935 words, the other 802, to the tutor through email, in March, 2018. Once this was completed, they were invited to write feedback about the whole process. The teacher then spent time with the students asking them questions and enabling them to reflect on the tests and the learning process and discuss any difficulties they were faced with. The texts, which they had learned the week previous to the tests, were selected from students’ textbook, Integrated Course II[13].

**Results and Discussion**

Ladeforged and Johnson [1] claimed that the principal surprasegmental features are stress, length, tone, and intonation, which are independent of the categories required for describing segmental features (vowels and consonants). For my part, the principal surprasegmental features should contain the four components: stress, pitch, length and pause. The findings showed that the investigated students had quite a few similarities and differences in the four parts.

**Stress**

It is easy for participants to read out the stressed syllable in isolation, but much more difficult when practising a full sentence or paragraph. “When words are said in connected speech, they may be pronounced with varying degrees of emphasis, and this results in varying degrees of deviation from the citation form”[1]. The three examples that follow show how the participants became frustrated and struggled to spot the stressed syllables in sentences.

……”Beside, I don’t know where to use WORD STRESS”……. (Tang)
……The English stress is not accurate, for example, some noan(should be “nouns”) and adjectives are not stressed, but some article and relative pronouns are stressed……. (Deng)
……About the stress, I think I am not good at it. I have no idea about where to need stress……. (Wang)

Comparatively, “it is difficult to define stress from a listener’s point of view. A stressed syllable is often, but not always, louder than an unstressed syllable.”[1] In the comments, 19 participants
acknowledged that they ignored or did not know where they needed to stress the syllables or words in the connected utterances.

English speech rhythm is stress-timed, while Chinese is syllable-timed [14]. The participants usually utter each character or syllable with similar duration in Chinese. On the contrary, English language focuses more on specific stressed words, while quickly gliding over the other less important words. Obviously, the feature would bring obstacles to the Chinese EFL learners, who can not easily change their habits from syllable-timed to stressed-timed.

**Pitch**

Pitch could be divided into two types: tone and intonation. Tone refers to the pitch patterns over syllables to distinguish words. Intonation refers to pitch patterns over phrases and sentences.

In the English language, there is no individual tone for a specific word. Nevertheless, how tone and pitch is used during the whole of a sentence can change both its meaning and the emotion expressed. Changes in pitch in are used to emphasize importance or express emotion, not to give a different meaning to the word because of the sound. Stress and intonation are both the main characteristics of spoken English.

Chinese, by comparison, is a language that uses tones as its main characteristics. The Chinese language uses four tones, in which the pitch can change the meaning of a word. With this background, most of the participants were puzzled when reading English without fluctuations. They can quickly respond to a single word, but not fully understand the pitch patterns in a sentence. They showed uncertainty when trying to tackle the falling, rising, or flat tone in a sentence, with the exception of Yes/No questions or obvious emphatic utterances.

Thus, most of students read English in a flat and emotionless tone. It is frustrating that they found that they could not resonate with writers in utterances. 23 of them stated their lack of passion in reading and a few clearly wrote in their comments as follows:

……The emotion is flat…….(Luo)
……The tone of the passage is flat and unemotional…….(Li)
……There is not much emotional change……. (Zhou)
……Third, the sentence has little fluctuation and the tone is gentle…….(Peng)
……There are no ups and downs in the article…….(Xiang)

These results indicate that the students could not immediately grasp the intonation in a longer or complex, complete sentence and felt frustrated in resonation with the writers. Meanwhile, some participants also attribute this to their lack of vocabulary and poor understanding of the whole sentence, paragraph or text.

**Length**

Ladeforged and Johnson [1] pointed out that “individual segments in a syllable may also vary in length”. Unfortunately, no participant realized the fact that they need to change the length in a syllable in different contexts. Several of them commented on their duration, but did not focus on a single syllable.

……the duration is too long…….(Yang)
……First, about duration, i usually don’t pay attention to it, in my view, they have no difference so that my reading sounds not good…….(Li)
……I think my duration is appropriate…….(Cheng)
……my recording is not too fluent and the duration is too long…….(Lan)
……I think the duration is appropriate (should be “appropriate”)…….(Wang)

If participants cannot keep an appropriate length of a single syllable, they definitely cannot control the speed of the whole text. Based upon the model recording—7:02 for Text A and 6:23 for Text B in the disk from the publishing house, we have drawn a pie chart to analyse the participants’ length distribution in Figures 1 and 2.

If we measure the reading rate with the formula:

Reading rate (wpm)=Total words/length

we can get the rate of model recording as follows: RRA=132.9 RRB=125.6 (RR for Reading rate)
Dlugan [15] did an analysis of nine Ted talks and found out the average word count was around 163 words per minute, with the lowest being around 133 and the highest around 199. Therefore, we can treat RRA and RRB as the minimum acceptable speed. As seen in Figures 1 and 2, only 6% and 4% of the participants can make the pace of their reading equal or faster than the model speed. A majority of the participants could not increase the pace of their reading and read at a much slower pace compared to the students who read at an average pace. Through analysing the learners comments I discovered that, some participants attributed this to rereading, or not being familiar with the text. However, even though several participants practiced more times and were more familiar with the texts, they still could not increase their reading pace. One of the reasons is that they can not ascertain the length of every syllable.

Thus, if the participants can learn how to keep the length of single syllable, they will affirmatively control their speed and length very well.

Pause

The participants’ recordings show that they are confused in the pause.

……I can’t pause in the right place. I’m always hope I can read the whole sentence in one breath, but I can’t, so I paused when I haven’t enough lung capacity…….(Zou)

……I would easily ignore the place where should be paused…….(Wen)

……I can’t make correct pauses in sentence…….(Wang)

As shown in the examples, the participants are unable to confirm where they should pause in a sentence, especially in a longer and complex one. A few of them even complained that their smaller lung captivity resulted in their frequent pauses in reading long sentences. It seems that while reading aloud, the participants concentrated more on the producing of single word, not a complete sentence. They were confident when seeing the words in vocabulary, but become puzzled when uttering the longer and complex sentences. They lacked proficiency in their reading aloud. They forgot that they needed to know the structure of sentences and how they link to other sentences or paragraphs, which determines the pause points, and stress and intonation as well.

Results imply that the participants are not aware of their flaws in segmental features, such as the vowels, consonants, and the stress of single words, but also that of suprasegmental features, stress, intonation, pitch and length, etc. It was revealed that ten participants from urban schools in Chengdu, or with extra pronunciation training, showed a much stronger proficiency than the other students. Meanwhile, language transfer still exists in suprasegmental features from Chinese to English, which to a certain extent hinders the improvement of participants’ pronunciation.

Conclusions and Limitations

In accordance with the Gaokao results, even though the participants in the study cannot compete with the English majors in prestigious universities and do not learn English at the same excelled level, they still aim to be English teachers. Consequently, how to prepare them for qualified teachers’ roles is a challenging task. Furthermore, English majors do not invariably share the similar phonetic features with non-English majors on the account that they have accepted more phonetic training courses. Nevertheless, the study can still provide support for pedagogy of teaching and as-
sessing spoken English in various areas, which helps non-native student English teachers, or English majors, become overall strategic. In addition, the study can be replicated to train and improve spoken English for the non-native student English teachers or non-native English teachers.

Meanwhile, this research has some limitations, the main one being the limited number and origin of participants. Future research involving a wide area of participants is necessary in order to obtain a more comprehensive understanding of the study. In the research, the method applied is only working from fixed texts. In the future, more types of tasks could be acquired to explore possible interactions between variation and language acquisition by learners from different language backgrounds. Furthermore, in order to investigate the learners’ developmental sequences in suprasegmental features, longitudinal studies should be conducted.

References