INITIAL /r/ IN AMERICAN ENGLISH AND MANDARIN CHINESE AND HOW TO TEACH IT

Yao Shen
University of Michigan

I. Initial /r/ in American English and Mandarin Chinese

Language is an oral device. It uses sounds to convey meaning. Two languages may use the same sound to distinguish meaning. However, the phonetic characteristics of this sound in different positions may not be the same in both languages. For example, the Chinese /r/ sound in initial position has a fricative quality which the English /r/ in initial position does not have. In fact, the sound may even vary in the same language. The presence or absence of one or more phonetic features may depend on the sequence in which the sound occurs. An illustration of such positional variants is the presence of the slight lip rounding in the pronunciation of the English /r/ in initial position and the absence of such lip motion in final position. Variants may differ in detail from those of the same sound in another language. That is, certain positional variants may be distributed one way in one language and another way in another language. For example, the initial /r/ in English is generally pronounced with slight lip motion regardless of the nature of the vowel sound that follows while the /r/ in initial position in Chinese is sometimes pronounced with lip motion and sometimes without depending upon the nature of the vowel sound that follows. In such a situation, when a speaker uses the distribution pattern of his own language in speaking a foreign language, he is often referred to as speaking with an "accent."

In order to eliminate the "accent," it is necessary for the teacher and the student to know the cause of the "accent," the nature of the "accent," and how to remove the "accent."

The present article deals with the retroflex sound, /r/, both in American English and in Mandarin Chinese as it occurs before a vowel sound. Since there are no conso-

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nant clusters in Chinese, the discussion is limited to the single retroflex sound, /r/, in initial position.\(^2\)

/r/ occurs in both the sound system of American English and that of Mandarin Chinese. It also occurs in both systems in initial and final positions. However, there is more than one phonetic feature which the Chinese initial /r/ has that the Chinese /r/ in final position does not have, but the particular phonetic feature that concerns us here is the lip motion involved.\(^3\) When /r/ is either followed or preceded by a rounded vowel sound, there is lip action. When /r/ is neither followed nor preceded by a rounded vowel sound, there is no lip action.\(^4\)

Without lip action: \quad \text{With lip action:}

\begin{align*}
\text{reh} & \quad \text{ruh} \quad \text{(hot)}\text{5} \\
\text{ger} & \quad \text{dour} \quad \text{(root)}
\end{align*}

In English, the /r/ in initial position differs phonetically from the /r/ in final position in at least one feature. This phonetic feature is the slight motion of the lips. The following are a few of the English words with /r/ in both positions. /r/ in initial position is generally pronounced with some motion of the lips while /r/ in final position usually is not: reader, river, rare, ruler.

The presence of this slight motion of the lips is not necessarily due to the nature of the vowel sounds that fol-

\(^2\)Once this is taken care of, the group of the three retroflex sounds in Chinese, /j/, /ch/, /sh/ can be drilled in the same way.

\(^3\)Another phonetic feature which the initial /r/ has and which the final /r/ does not have is the voiced fricative quality. This characteristic is quite obvious when /r/ is accented. When unaccented, it is not present.


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low /r/ as it is in Chinese. The following is a list of examples showing that the lip movement is usually present whether /r/ is followed by front or mid vowel sounds which are unrounded in English or by back vowels which are rounded in English: read, rid, rate, red, rat, rot, rug, rue, rook, roe, raw.

The presence of the motion of the lips in /r-/ in American English and in Mandarin Chinese is different in distribution. In American English, there is a slight rounding of the lips in pronouncing /r-/ regardless of whether the vowel sound is rounded or not. In Mandarin Chinese, this motion of the lips is present only when the vowel sound that follows /r/ is rounded. This phonetic feature is not present when the /r/ is followed by other vowel sounds.

<table>
<thead>
<tr>
<th>English (column 1)</th>
<th>Chinese (column 2)</th>
</tr>
</thead>
<tbody>
<tr>
<td>/r/ followed by unrounded vowel sounds</td>
<td>/r/ followed by rounded vowel sounds</td>
</tr>
<tr>
<td>read</td>
<td>rue</td>
</tr>
<tr>
<td>rid</td>
<td>rook</td>
</tr>
<tr>
<td>rate</td>
<td>roe</td>
</tr>
<tr>
<td>red</td>
<td>raw</td>
</tr>
<tr>
<td>rat</td>
<td></td>
</tr>
<tr>
<td>rot</td>
<td></td>
</tr>
<tr>
<td>rug</td>
<td></td>
</tr>
<tr>
<td>(with lip motion)</td>
<td>(without lip motion)</td>
</tr>
<tr>
<td>raan (to dye)</td>
<td>rong (wool)</td>
</tr>
<tr>
<td>rang (to shout)</td>
<td>ruh (enter)</td>
</tr>
<tr>
<td>rau (to forgive)</td>
<td>roan (soft)</td>
</tr>
<tr>
<td>reh (hot)</td>
<td>ruey (acute)</td>
</tr>
<tr>
<td>ren (man)</td>
<td>ruenn (to moisten)</td>
</tr>
<tr>
<td>rheng (to throw)</td>
<td>ruoh (weak)</td>
</tr>
<tr>
<td>rhy (the sun)</td>
<td></td>
</tr>
</tbody>
</table>

The word, rou (meat), is omitted from the list. The lip action in this /r-/ is extremely slight, if any. When compared to the English word, roe, the lip action in rou is far less than that in roe. This is also true when rou is compared to ruh (enter). In the pronunciation of ruh, the /r/ is pronounced with the lips very much rounded.

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Thus when an English speaking student brings this slight motion of the lips into his pronunciation of the Chinese /r-/ which does not require any motion of the lips, he speaks with an "accent." Likewise, when a Chinese speaking student pronounces the English /r-/ without any motion of the lips, he speaks with an "accent." The following method is proposed to remedy the situation.

Whether it is the case of teaching the English speaking students to produce the Chinese /r-/ or the Chinese speaking student to produce the English /r-/, it is necessary for the teacher to describe to the students the main cause of the "accent" in order to remove the "accent." The teacher should not rest on the assumption that a native speaker always knows the phonetic features of each sound in the sound system of the language. Instead he should explain to the students the cause of the "accent" in a simple and clear statement followed by examples illustrating the point given in the statement. In the case under discussion, the teacher should tell the students that /r-/ in English is usually pronounced with a slight motion of the lips regardless of the nature of the vowel sound. For example: read, rid, rate, red, rat, rot, rug, rue, rook, roe, raw. In Chinese, there is no lip motion when /r-/ is followed by an unrounded vowel sound. For example: ren (man) and rang (to let). However, when /r-/ is followed by a rounded vowel sound, there is lip action. For example: rong (wool) and ruenn (to moisten).

There are two things a language teacher needs to remember in such a situation. The first one is that the fact that students know the cause of the "accent" is no indication that they can produce the sound without the "accent." They need oral drills to remove the "accent." Second, since there is a point at which the English /r-/ and the Chinese /r-/ are similar, exercises should be such that they begin with what is already within the experience of the students, then proceed to the point where the two differ. Such a procedure can be used whether the teacher is teaching the English /r-/ to Chinese speaking students or vice versa.
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II. How to Teach the American English /r-/ to Mandarin Chinese Speakers

Practice 1 consists of words in Chinese that begin with /r-/ and that are followed by rounded vowel sounds. The purpose is to show students that the two /r-/'s in certain positions are alike. The teacher does not need to spend much time on this exercise.

**Practice 1**

**Chinese:** ru (Confucian), ruenn (to moisten)

**English:** rue, rook, roe, raw

Teacher: ru, rue
All students: ru, rue
Student A: ru, rue
Student B: ru, rue

Practice 2 begins with the teacher re-stating the difference between the English /r-/ and the Chinese /r-/ when both are followed by unrounded vowel sounds. The purpose of the exercise is to have students recognize the difference, for students should not be asked to produce the difference before they can recognize it. The teacher pronounces the following words; the students notice the difference of the shape of the lips of the teacher and comment upon it. When he is pronouncing the Chinese words, there is no lip action. When he is pronouncing the English words, there is lip action.

Chinese: ranq (to let), rau (to spare), reh (hot), ren (man)

English: read, rid, rate, red, rat, rot, rug

Since the problem here is not that the Chinese students cannot produce the /r-/ with rounded lips but rather that the /r-/ with lip action occurs in a different situation, the thing to do is to bring the familiar act into this new situation. Thus the teacher first gives a Chinese word whose /r-/ is followed by a rounded vowel sound, then an English word whose /r-/ is followed by an unrounded vowel sound. The teacher reminds the students of the necessary lip motion for the production of the English /r-/.
Practice 2 Teacher: ruenn (to moisten)  
(Round your lips)  
r-read  
All students: (Lips rounded)  
r-read  
Student A: (Lips rounded)  
r-read  
Student B: (Lips rounded)  
r-read  

Practice 3 aims to make students produce the English /r-/ followed by an unrounded sound with the help of an English word whose /r-/ is followed by a rounded vowel sound. Although by this time, the students should know that the English /r-/ is accompanied by lip action, it does no harm if the teacher should repeat the statement.

Practice 3 Teacher: rue,  
r-rate  
All students: rue,  
r-rate  
Student A: rue,  
r-rate  
Student B: rue,  
r-rate  

Practice 4 is to find out if the students by this time can produce an English /r-/ followed by an unrounded vowel sound with lip action. The teacher watches for the lip action.

Practice 4 Teacher: ring  
All students: ring (With lip motion)  
Student A: ring (With lip motion)  
Student B: ring (With lip motion)  

Practice 5 contains English words whose /r-/ is followed by either a rounded or an unrounded vowel sound. By this time the lip motion should be fairly automatic. However, the teacher watches for it just the same.

Practice 5 Teacher: rock  
Student A: rock (With lip motion)  
Teacher: rag  
Student B: rag (With lip motion)  
Teacher: rib  
Student C: rib (With lip motion)
III. How to Teach the Mandarin Chinese /r-/ to American English Speakers

The problems involved in teaching the American English speakers to produce the Mandarin Chinese /r-/ are more complicated than those involved in the teaching of the Mandarin speakers to produce the American English /r-/. There are two reasons. First, to each Chinese word, there is a tone attached; second, /r-/ produced without lip action is not a familiar act to the English speakers. In order to focus the attention on /r-/ alone, it seems necessary, for the moment, to sacrifice the stress on tones so that the sound /r-/ is the sole center of attention.

Practice 1 consists of words in English and in Chinese that begin with /r-/- and that are followed by rounded vowel sounds. The teacher should not spend much time on this exercise.

Practice 1

English: rue, rook, roe, raw
Chinese: ru (Confucian), ruenn (to moisten)
Teacher: rue, ru
All students: rue, ru
Student A: rue, ru
Student B: rue, ru

Practice 2 begins with the teacher re-stating the difference between the English /r-/ and the Chinese /r-/ both followed by an unrounded vowel sound. In pronouncing the following words, the students notice the difference of the shape of the lips of the teacher and comment upon it. When he is pronouncing the English words, there is lip action. When he is pronouncing the Chinese words, there is no lip action.

English: read, rid, rate, red, rat, rot, rug
Chinese: ranq (to let), rau (to spar-), ren (man)

The problem now is to get the English speakers to produce the Chinese /r-/ without lip motion when it is followed by an unrounded vowel sound. Before the students are asked to produce the Chinese /r-/ without lip action, they must be drilled to recognize the difference between the /r-/
with lip action and the /r-/ without lip action. Two exercises are given. In the first one they are to look for the presence and absence of lip action with their eyes. In the second one they are asked to listen for the presence and absence of lip motion without looking. Words that are pronounced approximately alike both in English and in Chinese in which the nature of /r-/ is the only element of difference are used. The following are a few of the examples:

English: run, rung, wrong
Chinese: ren (man), rheng (to throw), ranq (to let)

Practice 2

Exercise 1

Teacher: English: run Chinese: ren
All students: (Watch for the motion of the lips)
Teacher: run (Is there any motion of the lips?)
Student A: (Yes.)
Teacher: ren (Is there any motion of the lips?)
Student B: (No.)

Exercise 2

Teacher: English: run Chinese: ren
All students: (Listen without looking at the teacher)
Teacher: run (Is there any motion of the lips?)
Student A: (Yes.)
Teacher: ren (Is there any motion of the lips?)
Student B: (No.)

Exercises in Practice 3 are to develop the productive ability of the students. It is advisable not to drill the students in producing /r/ alone. If /r/ is drilled alone, the result is often like this: (unrounded) /r/; (rounded) /r-/en. There are numerous ways one can drill the students. Two are suggested below. The students may pull back the corners of their lips so as to eliminate the motion of the lips as much as possible. They may try to smile so that lips are automatically pulled back. The following exercises illustrate the two methods suggested above.

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7Suggested by Richard D. Andrade.
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Practice 3

Exercise 1
Teacher: ren
All students: (Pull back the corners of the months and try to pronounce) ren
Student A: (Same method) ren
Student B: (Same method) ren

Exercise 2
Teacher: ren
All students: (Try to smile and pronounce) ren
Student A: (Same method) ren
Student B: (Same method) ren

Practice 4 contains Chinese words in which /r-/ is followed by either a rounded or an unrounded vowel to see if the students can produce the /r-/'s with a difference. However, the teacher warns them of the situation before they are asked for production.

Practice 4
Teacher: (With rounded lips) rong
Student A: (With rounded lips) rong
Teacher: (With unrounded lips) reh
Student B: (With unrounded lips) reh

Practice 5 aims to see if the students can produce the Chinese /r-/ without lip motion and also without being told.

Practice 5
Teacher: reh
Student A: reh (Without lip motion)
Teacher: ruh
Student B: ruh (With lip motion)