Tonal Patterns of Linyi Dialects

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Introduction

• The present study mainly discussed the dialect that belongs to the Xilu dialect.
• Previous research about Linyi dialect has come to some conclusions.
  • Tian[5] proposed that the four citation tones are Yinping(tone1) as 213, Yangping(tone2) as 53, Shangsheng(tone3) as 55, Qusheng(tone4) as 312(31)
  • Paper [6] offers a systematic study of the sound system of Lanshan dialect (also a district from Linyi), The four tones in this study are tone1 as 214, tone2 as 53, tone3 as 55, and tone4 as 31 or 312.
  • Liu [7] analyzes the tone sandhi phenomenon and makes a contrast with Xuzhou dialect and Pizhou dialect (locates in the north of Jiangsu Province), through the knowledge of language contact and Synchronic analysis.
  • Previous study has demonstrated that Linyi has four citation tones, specifically, the tonal values is Yinping(tone1) 214(213), Yangping (tone2) 53, Shangsheng (tone3) 55, Qusheng (tone4) 312(31)(Qian [3], Ma[4]).

Methodology

• Subjects: Four speakers participated in the experiment. Each speaker was recorded reading a list of 100 mono-syllabic words (25 different words × 4 tones) and 100 disyllabic words (20 different tone combinations × 5 words).
• Materials: The mono-syllabic segment was selected from Qian [3], which covers twenty-five samples for Yinping (tone1), Yangping (tone2), Shangsheng(tone3), and Qusheng (tone4), respectively.
• Data Collecting: Then the LOG values were calculated by the formula below:
  \[ T = \frac{\left(\lg x - \lg \min\right)}{\left(\lg \max - \lg \min\right)} \times 5 \]

Discussion

• Tonal pattern of mono-syllabic:

The comparison of tonal pattern.

<table>
<thead>
<tr>
<th>Tone</th>
<th>Previous</th>
<th>This Paper</th>
<th>Mandarin</th>
</tr>
</thead>
<tbody>
<tr>
<td>YinPing(T1)</td>
<td>213(214)</td>
<td>213(312)</td>
<td>55</td>
</tr>
<tr>
<td>YangPing(T2)</td>
<td>53</td>
<td>51</td>
<td>35</td>
</tr>
<tr>
<td>ShangSheng(T3)</td>
<td>55</td>
<td>44</td>
<td>214</td>
</tr>
<tr>
<td>Qusheng(T4)</td>
<td>312(31)</td>
<td>312(41)</td>
<td>51</td>
</tr>
</tbody>
</table>

When the second syllable is the time T4, T4 changes, behind the four tones in syllables, 41 were T4, will be turned into a falling tone. Three other cases, when the second syllable is T1,T2,T3, and there had been no tone sandhi observed.

• Tonal combinations with the same final voiceless syllable tone

The above figure displays patterns that when the four tones followed by a voiceless tone. T1 shows as ‘32’, T2 as ‘44’, T3 as ‘31’, T4 as ‘53’. While in Ma[4]’s research, T1 shows as ‘31’, T2 as ‘55’, T3 as ‘214’, T4 as ‘53’.

Conclusions

Results of citation tones are YingPing(Tone1) shows as 213(312), YangPing(Tone2) as 51, Shangsheng(Tone3) as 44, Qusheng(Tone4) as 312(41). We can conclude that the results of former research are reliable. What we got in this paper is that slight differences can be seen from the initial part and the final part. This may be proved with more perception experiment. Another view is that tonal pattern of male differs from that of female.

The discussion of tone sandhi of Linyi dialect found more subtle differences according to the results of former research. As can be seen from Table 2, the obvious tone sandhi is T2+T4→T3+T4 and T4+T4→T3+T4. When Tone4 is before other tones, it changes from low-falling tone to falling tone. The similar phenomenon happens to Tone1, it changes from low-rising tone to rising tone as the initial tone.