L1 intonational categories as “perceptual attractors” during L2 imitation
Caterina Petrone, Leonardo Lancia, Cristel Portes

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INTRODUCTION

- In L2 learning, native (L1) phonological representations act as “perceptual attractors” to which similar non-native sounds are assimilated [1, 2];
- Competition with the inventory of the language/dialect of origin modulates segmental imitation by selective processes [3];
- Phonological properties of a speech sound replace its phonetic properties with the passing of time [4], e.g., by matching to exemplars or by rehearsal of articulatory programs [1, 5].

Intonation?

- Speakers reproduce the phonological form of an utterance, not its phonetic details [6];

BUT: When imitating non-native dialects, the f0 contour is partly modified to approximate the target dialect [7].

H1: Lecce speakers will be less accurate in imitation since they perceive German contours as variants of their native dialect contours

H2: Less accurate reproduction when imitation is delayed/rehearsal is reduced because of a decay of detailed f0 memories.

Corpus & Methods

- Shadowing:

<table>
<thead>
<tr>
<th>Baseline Task</th>
<th>Main Task</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prendevo la neve? Did she travel by ship?</td>
<td>Er nahl ‘ne Blume? Does he paint a flower?</td>
</tr>
<tr>
<td>Guardavvi da mare? Did she look at the sea?</td>
<td>Er trinkt ‘ne Limo? Does he drink a lemonade?</td>
</tr>
<tr>
<td>Stringava la mano? Did she shake hands?</td>
<td>Ste ist ‘ne Mühle? Does she eat a carrot?</td>
</tr>
<tr>
<td>Spalavvi la neve? Did she shovel snow?</td>
<td>Er baut ‘ne Mühle? Does he build a mill?</td>
</tr>
<tr>
<td>Bereccuvvi il legno? Did she burn wood?</td>
<td>Er mag Salami? Does he like pepperoni?</td>
</tr>
<tr>
<td>Chiamava la moglie? Did she call the wife?</td>
<td>Er spieht Violine? Does he play violin?</td>
</tr>
<tr>
<td>Comprouva la luna? Did she buy the moon?</td>
<td>Ste haten ze Waage? Do they have a balance?</td>
</tr>
<tr>
<td>Cambiava lavoro? Did she get a new job?</td>
<td>Er sucht Maroni! Does he look for chestnuts?</td>
</tr>
</tbody>
</table>

- Imitators with no knowledge of German

- “Memory” conditions: Speaking onset at the end of Q (Immediate), after a silent pause of 4 s. (Delayed) or an answer of 4 s. to Q (Filled).

Questions (Q) [8, 9]

(Northern Standard) German L* H- H% Steep rise right after the f0 valley
Lecce Italian L* L- H% Shallow rise, late rise onset
Neapolitan L*+H L-L% f0 Rise-fall

Hypotheses

H1: Lecce speakers will be less accurate in imitation since they perceive German contours as variants of their native dialect contours

H2: Less accurate reproduction when imitation is delayed/rehearsal is reduced because of a decay of detailed f0 memories.

DISCUSSION

- Language interference:
  - Neapolitan: Imitation of German Qs not mediated by grammar -> + attention to acoustic details - Lecce it.: Phonological ambiguity -> Speakers rely on phonetic implementation rules of their own variety.
  - No memory effects:
    - No rehearsal for continuous f0?
    - too simple task?

○ Increase cognitive load by increasing linguistic (i.e. syllabic) complexity (in progress)

CONCLUSION

- Similarly to the segmental level, intonation is anchored by native prosodic representations.
- Functional mixed models: New paradigm for exploring intonation.

References


Caterina Petrone*, Leonardo Lancia**, and Cristel Portes*
*LPL, CNRS & AMU, Aix-en-Provence; **LPP, CNRS, Paris