Variation in the realization of /z/ within and across Dutch adolescents of Moroccan, Turkish and Dutch descent

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The research project “Roots of Ethnonlects”

- ... investigates features which characterize the speech of Dutch adolescents of Moroccan, Turkish and Dutch descent.
- Among the research questions are the following:
  - Q1. Which aspects of language use of which components of the grammar characterize ethnonlects at distinct varieties?
  - Q2. To what extent are ethnonlects based on interference from the original language of the ethnic group in question (substrate effect)?
  - Q3. ... on properties resulting from processes of second language acquisition?
  - Q4. ... and on local (urban) dialects or other indigenous non-standard varieties?
  - Q6. Is there any evidence of spread of ethnic varieties outside of the ethnic group?
  - Q8. To what extent can speakers of an ethnonlect shift to more standard varieties and to non-ethnic non-standard varieties?

Study of /z/

- One of the features that characterize the speech of Dutch adolescents of Moroccan, Turkish and Dutch descent is the pronunciation of the /z/.
- Preliminary results

Speakers

- Male speakers with Moroccan, Turkish and Dutch language backgrounds
- Born and raised in the Netherlands
- Two cities: Amsterdam and Nijmegen
- 18-20 yrs (10-12 yrs)

<table>
<thead>
<tr>
<th>Language background (LB)</th>
<th>Place</th>
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<tbody>
<tr>
<td></td>
<td>Moroccan (M)</td>
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<tr>
<td>Amsterdam (A)</td>
<td>4</td>
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<tr>
<td>Nijmegen (N)</td>
<td>3</td>
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</tbody>
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Task

- Spontaneous conversations
- Between 2 speakers
- 3 or 4 conversations: With 1 or 2 members of their own language background and 1 member of each other language background.
- About 60 minutes per conversation
- Free conversation, if needed with help of card games, new papers, football/soccer magazine

Analyses Z

- From each conversation, 30 /z/ /words were selected per speaker
- minimum of 5 per left-hand environment Obstruent, Sonorant, Vowel.
- Selected z-words:
  - phonological words that begin with a /z/,
  - including 2nd parts of compounds and particle verbs
  - in words like 'Saturday', 'kantoor', 'toekomst', 'toekomst', 'stoek up'
  - /z/ followed by a vowel, but not by a schwa.
  - not selected: 'metro hour', 'the his'
  - No /z/ that follows a schwa or a pause
  - not selected: 'she isn’t big...’ said he...
  - a word is selected at most three times for a speaker in one conversation.
  - Words that have orthographically a (o), but officially have to be pronounced with an [z] are not selected.
  - E.g. meet (‘money’), meaning ‘money’.
  - Not selected: words that are read from for example (news)papers and magazines and words that are uttered in a (intentionally) strange way.
Analyses Z

- Today I will discuss two variables:
  - Devoicing of z
  - Sharpness of z

Voice background

- All languages (Dutch, Moroccan Arabic, Berber and Turkish): distinction voiceless [s] and voiced [z].
- Dutch:
  - obligatory devoicing of fricatives, including /z/ after voiceless obstruents (Progressive Assimilation rule)

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<tr>
<td>ziteok</td>
<td>opzoekken</td>
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<td>[opzoekken]</td>
<td>[gast ronmar]</td>
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</tbody>
</table>
| 'beau bag' | 'look up' | 'goes like just (like that)'

- Tendency to devoice the z after other sounds

Voice background

- Dialects of Amsterdam and Nijmegen
  - Amsterdam: always devoicing of z, in all sections of society
  - Nijmegen: also devoicing of z, yet more variably than Amsterdam

Voice results

- Do they use the Progressive Assimilation rule?
- Some speakers use Regressive Assimilation:
  - E.g. opzoekken 'look up' [opzoekken]
- Chi-Square Tests per person
- 4 speakers don't use the rule, all with non-Dutch LB

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<th>Difference between 3 environments</th>
<th>No difference between 3 environments</th>
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<tbody>
<tr>
<td>Difference</td>
<td>1 AM + 1 NT (all environments differ)</td>
<td></td>
</tr>
<tr>
<td>No difference</td>
<td>All other speakers (O vs. S+T)</td>
<td>1 AT (mainly voiceless)</td>
</tr>
<tr>
<td>Sonorant-Vowel</td>
<td>(O vs. S+T)</td>
<td>1 NM (mainly voiced)</td>
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<tr>
<td>(all environments equal)</td>
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- Speakers differ for environments > take environment Vowel to test for effects

Voice results

- Voicedness of z after vowels.

- Effect of place (F(2) = 10.528, p<0.00)
- No main effects of LB speaker and LB interlocutor
- Interaction effect between LB speaker and LB interlocutor for Amsterdam (F(2) = 3.08, p=0.02), but not for Nijmegen (F(2) = 1.34, p=0.31)
- T talking to M vs. M talking to T in Amsterdam

Voice conclusion/discussion

- Not every bilingual speaker uses the Progressive Assimilation rule
- Amsterdam more voiceless than Nijmegen → Influence of surrounding dialect
- Speakers in Amsterdam adapt to the interlocutor, but patterns differ between groups
- M talking to T vs. T talking to M in Amsterdam → Do the T+M speakers emphasize a hypothetical difference between the two groups?
‘Sharp’ z
Examples

- luister als ik uh hartzektes had (AT)
- ik heb geen zin meer man (NM)
- en zijn ze allemaal door? (NM)

‘Sharp’ z
Background

- ‘sharp’ z does not exist in Dutch.
- ‘sharp’ z thus has more frication and tenseness than the average Dutch one.
- The position of the corona is more forward in the Moroccan languages as well as in Turkish than in Dutch, i.e. dental (or denti-alveolar) instead of alveolar.
- Moroccan Arabic, Tarifit/Rif Berber and Tachelhit/Sous Berber also have emphatic fricatives: S (§) and Z (ฎ)

‘Sharp’ z
results

- No ‘sharp’ z by Dutch speakers
- No effect of place (F1/p=0.065, p=0.80)
- Amsterdam: No main effects of LB speaker and LB interlocutor and no interaction
- Nijmegen: Main effect for LB interlocutor (F1/p=4.235, p=0.041), no effect for LB speaker (F1/p=1.428, p=0.112). Interaction effect between LB speaker and LB interlocutor (F1/p=0.598, p=0.487)
- M talking to M in Nijmegen

Sharpness

conclusion/discussion

- No ‘sharp’ z by Dutch speakers
- Both T+M used ‘sharp’ z.
- T+M are more homogeneous in Amsterdam than in Nijmegen.
- M in Nijmegen uses most ‘sharp’ z talking to M. in-group?

Overall conclusion

- effect of place for voicing
- Situational shift (= determined by LB interlocutor) for voicing only in Amsterdam, for ‘sharpness’ only in Nijmegen

Further research

- Expand with data 10-12 yrs old.
- Additional phonetic measurements.