"Would you like RED or WHITE wine? - I would like red WINE"
van Maastricht, L.J.; Swerts, M.G.J.; Krahmer, E.J.

Publication date:
2014

Document Version
Early version, also known as pre-print

Link to publication in Tilburg University Research Portal

Citation for published version (APA):

General rights
Copyright and moral rights for the publications made accessible in the public portal are retained by the authors and/or other copyright owners and it is a condition of accessing publications that users recognise and abide by the legal requirements associated with these rights.

• Users may download and print one copy of any publication from the public portal for the purpose of private study or research.
• You may not further distribute the material or use it for any profit-making activity or commercial gain
• You may freely distribute the URL identifying the publication in the public portal

Take down policy
If you believe that this document breaches copyright please contact us providing details, and we will remove access to the work immediately and investigate your claim.

Download date: 31. Oct. 2021
"Would you like RED wine or WHITE wine? - I would like red WINE."

NATIVE SPEAKER PERCEPTION OF (NON-)NATIVE INTONATION PATTERNS

Lieke van Maastricht, Emiel Krahmer and Marc Swerts
Tilburg center for Cognition and Communication, Tilburg University, The Netherlands
l.j.vanmaastricht@uvt.nl

GOAL OF OUR STUDY

To assess whether prosodic transfer effects found in L2 production, also affect intelligibility and naturalness in perception by L1 speakers.

FOCUS AND INTONATION IN L1 DUTCH & SPANISH

Dutch

New or contrasting information is generally ACCENTED and given information is deaccented (Bower, 2005; Swerts et al., 2002).

Ex. Die rode bezem en de [KROenen] bezem

The red broom and the GREEN broom

Spanish

The ACCENT is usually placed at the end of the intonational phrase, irrespective of information status (Bran, 2001; Auker, 2001).

Ex. El globo verde y el guante [VERDE]

The balloon green and the glove GREEN

RESEARCH QUESTIONS

RQ1 Does speech by Spanish learners of Dutch show intonational transfer effects from the L1, and do these diminish as the proficiency level of the learner increases?

Yes, see Van Maastricht, Krahmer & Swerts (2014).

RQ2 Since L2 speakers make less adequate use of pitch accent distribution than L1 speakers do, do Dutch natives also have more difficulty processing the speech of Spanish learners of Dutch than the speech of Dutch L1 speakers?

RQ3 If so, does the proficiency level of the L2 speakers influence the perception process, as is the case in the production of pitch accents?

Production

A quick recap

PARTICIPANTS (N=84):
26 L1 Dutch, 19 L1 Spanish, 19 Less proficient L2 Dutch (≥A2), 20 Proficient L2 Dutch (≥B1)

SPEECH ELICITATION TASK:
Contrastive/Contrastive, Given/Contrastive, Contrastive/Given, Given/Given.

MEASURE:
Difference score in Hertz (F1 stressed syllable word 2 - F1 stressed syllable word 1).

---

Perception test I - Reaction Times

PARTICIPANTS (N=41):
Dutch natives, who do not speak Spanish

REACTION TIMES TASK:
Does the fourth utterance that you hear correspond to the fourth picture on the screen?

MEASURE:
Reactions time in ms, from the onset of the fourth utterance, and the appearance of the fourth picture.

STIMULI:

4 speaker conditions:
Speaker group differences significantly from each other and both L1 groups at p<0.001.

---

Perception test II - Preference task

PARTICIPANTS (N=20):
Dutch natives, who do not speak Spanish

PREFEERENCE TASK:
Which of the following two utterances sounds the most natural to you?

Preference score (=Sum of the amount of times the ppt preferred the prosodically correct utterance over the prosodically incorrect utterance).

STIMULI:

Utterance A: "de rode ezel de [blauwe] ezel" (match)
Utterance B: "de rode ezel de [blauwe] gelt" (mismatch)

RESULTS:

---

Discussion & Conclusion

RQ8 Yes, it is more difficult for Dutch natives to process the speech of L2 Dutch spoken by Spanish natives, than it is to process L1 Dutch.

RQ9 Yes, similar to the transfer in the production of intonation, the proficiency level of the speaker influences the speed with which Dutch listeners perceive and process intonation.

However, the design does not control for the effect of segmental deviations in the case of L2 speech.

When comparing the prosodically correct and incorrect L1 speech, no differences are found.

Does this mean that pitch accent distribution doesn’t influence the perception by natives?

No, because the preference task shows us that when controlling for segmental deviations, native listeners are sensitive to the perception of deviant pitch accent distributions and have preferences based on the naturalness of the prosodic pattern of an utterance.

Further work will determine whether these "naturalness preferences" result in a difference in RT between less proficient and proficient L2 speakers, when segmental deviations are controlled for.