exploring the limits of implicit attitude measures from social psychology to study language attitudes:

contextualizing the P-IAT

Laura Rosseel, Dirk Geeraerts, Dirk Speelman

RU Quantitative Lexicology and Variational Linguistics
introduction

• since 1960s **little methodological innovation** in language attitudes research (until recently)

→ innovation:
  inspired by attitude research in **social psychology**
  e.g. implicit association test (IAT)

• exploring potential of IAT for linguistic attitude research: importing situational context into the IAT
outline

1. IAT 101

2. contextualized quantitative research into language attitudes using the IAT?

3. case study: introducing context in the IAT
outline

1. IAT 101

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IAT: 101

- reaction time based task to measure association between two concepts
- commonly used in social psychology since 1998
- recently adopted in linguistics
  - indexicality:
  - language attitudes:
    Redinger 2010; Pantos 2010, 2012; Rosseel, Speelman & Geeraerts 2015; Lee 2015; Watt & Llamas 2015
IAT 101

how does it work?

<table>
<thead>
<tr>
<th>TARGET</th>
<th>ATTRIBUTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>category names</td>
<td>variety1/variety2</td>
</tr>
<tr>
<td>stimuli</td>
<td>I like / I don’t like</td>
</tr>
<tr>
<td>v1, v2</td>
<td>v1, v2</td>
</tr>
</tbody>
</table>

Sociolinguistics Symposium 21, Murcia 16.06.2016
5 blocks of trials
IAT 101

practice blocks
IAT 101

I like

variety1
I like

variety2
I don’t like

I don’t like

variety1
I don’t like

variety2
I like

experimental blocks 3 & 5
IAT 101

variety1
I like

variety2
I don't like

variety1
I don't like

variety2
I like

experimental blocks 3 & 5
IAT 101

experimental blocks 3 & 5

incongruent pairing $\rightarrow$ slower
congruent pairing $\rightarrow$ faster

variety 1 I like
variety 2 I don’t like

variety 1 I don’t like
variety 2 I like
comparing reaction times in blocks with reverse pairings of target & attribute labels
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contextualized quantitative research into LAs using the IAT?

• what’s interesting about the IAT
  – good psychometric qualities
  – flexibility
  – new/different interpretation of ‘implicit’ attitudes
  – …
contextualized quantitative research into LAs using the IAT?

• HOWEVER also some restrictions:
  – binary/comparative structure
  – cognitively demanding
  – …
  – decontextualized
    <-> context dependency of language evaluation

(e.g. Soukup 2012, 2015; Eckert 2012; Levon & Buchstaller 2015, 341; Campbell-Kibler 2009, Lybaert 2014; Purschke 2015)
contextualized quantitative research into LA using the IAT?

• solutions for decontextualized IAT?

  – other quantitative social psychological measures, e.g. Relational Responding Task (RRT)

  – importing context into the IAT

  • social psychology → IAT is context sensitive
contextualized quantitative research into LA using the IAT?

- solutions for decontextualized IAT?
  - other quantitative social psychological measures, e.g. Relational Responding Task (RRT)
  - importing context into the IAT
    - social psychology → IAT is context sensitive
    - during IAT & before IAT

importing context possible for IAT as measure of LAs?
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3. case study: introducing context in the IAT
   3.1 experiment design
   3.2 results
   3.3 discussion
case study: experiment design

• previous studies: (e.g. Lybaert 2014)
  attitudes towards regional language variation in Dutch speaking Belgium are context dependent
  – standard Belgian Dutch (SBD) → formal situations
  – regionally accented speech → informal situations

~ production studies (Geeraerts & Van de Velde 2013)

• → can we measure this variation using the IAT?
case study: experiment design

• target varieties:
  – SBD accented speech
  – Limburg accented speech

• participants:
  160 Limburgian students in Leuven

\[ M_{\text{age}} = 20.96 \]
gender \( \rightarrow \) 55% f
case study: experiment design

- two manipulations:
  - context: formal vs. informal
  - context presentation:
    background image vs. multiple images between blocks
# Case Study: Experiment Design

<table>
<thead>
<tr>
<th># Participants</th>
<th>a</th>
<th>b</th>
<th>c</th>
<th>d</th>
<th>e</th>
<th>f</th>
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case study: experiment design

• 2 IATs followed by explicit rating task

a. Hoe sta je tegenover de accenten die je in het experiment gehoord hebt, in een informele situatie (bv. aan tafel of tijdens een avondje uit met vrienden of familie)?

Kleur een bolletje: hoe dichter bij een accent, hoe positiever je dat accent vindt.

Limburgs accent  O  O  O  O  O  O  O  O  neutraal accent

b. Hoe sta je tegenover een Limburgs accent (zoals gehoord in het experiment) in een informele situatie (bv. aan tafel of tijdens een avondje uit met vrienden of familie)?

negatief  O  O  O  O  O  O  O  O  positief

c. Hoe sta je tegenover een neutraal accent (zoals gehoord in het experiment) in een informele situatie (bv. aan tafel of tijdens een avondje uit met vrienden of familie)?

negatief  O  O  O  O  O  O  O  O  positief

• demographic information
outline

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case study: results

- P-IATs

![Graph showing the relationship between preference for standard in informal and formal languages. The graph includes data points for expected and unexpected stimuli, with legend labels for 'f expected', 'm expected', 'f unexpected', and 'm unexpected'. The x-axis represents preference for standard in formal, ranging from -1.0 to 1.0, and the y-axis represents preference for standard in informal, ranging from -1.0 to 1.0. The graph includes annotations for 'lim for sbd inf', 'sbd', 'lim', 'sbd for lim inf', and 'exp a'.]
case study:

- P-IATs

background picture
case study:

- P-IATs

sequence of pictures before each block of IAT
case study: results

- explicit ratings

```
INFORMAL – forced choice

FORMAL – forced choice
```
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case study: discussion

• does the IAT only measure ‘deep’, ‘general’, context independent associations after all?  
  <-> social psychological literature

• no context effect in attitudes towards regional vs. standard accent in Flanders?  
  <-> previous linguistic studies

• problem in experiment setup?  
  → not straightforward to implement context in IAT

• importance individual speakers
• relation IAT results – explicit ratings
thank you!

for further information:
laura.rosseel@kuleuven.be
http://wwwling.arts.kuleuven.be/qlvl/laura
references


references


references


references


Case study: results

- P-IATs

![Graph showing boxplot with annotations](image)
case study

- P-IATs

background picture
case study

- P-IATs

sequence of pictures before each block of IAT