

Exploring the limits of the Personalized Implicit Association Test as a new measure of language attitudes:

contextualizing the P-IAT

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fwo Research Foundation Flanders
Opening new horizons

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

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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, social meaning:
    Campbell-Kibler 2012, 2013; Llamas et al. 2016; Hilton, Rosseel, Smidt & Coler 2016
  - language attitudes:
    Babel 2010; Redinger 2010; Pantos 2010, 2012; Rosseel, Speelman & Geeraerts 2015; Lee 2015 ; Watt & Llamas 2015; Loudermilk 2015

IAT 101

how does it work?

	TARGET	ATTRIBUTE
category names	variety1/variety2	I like / I don't like
stimuli		

IAT 101

how does it work?

	TARGET	ATTRIBUTE
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stimuli	v1 v2	

IAT 101

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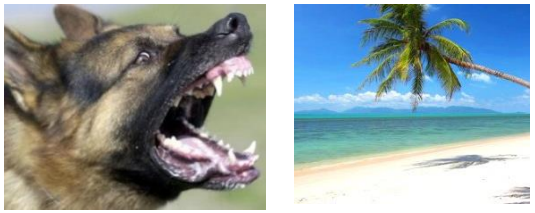
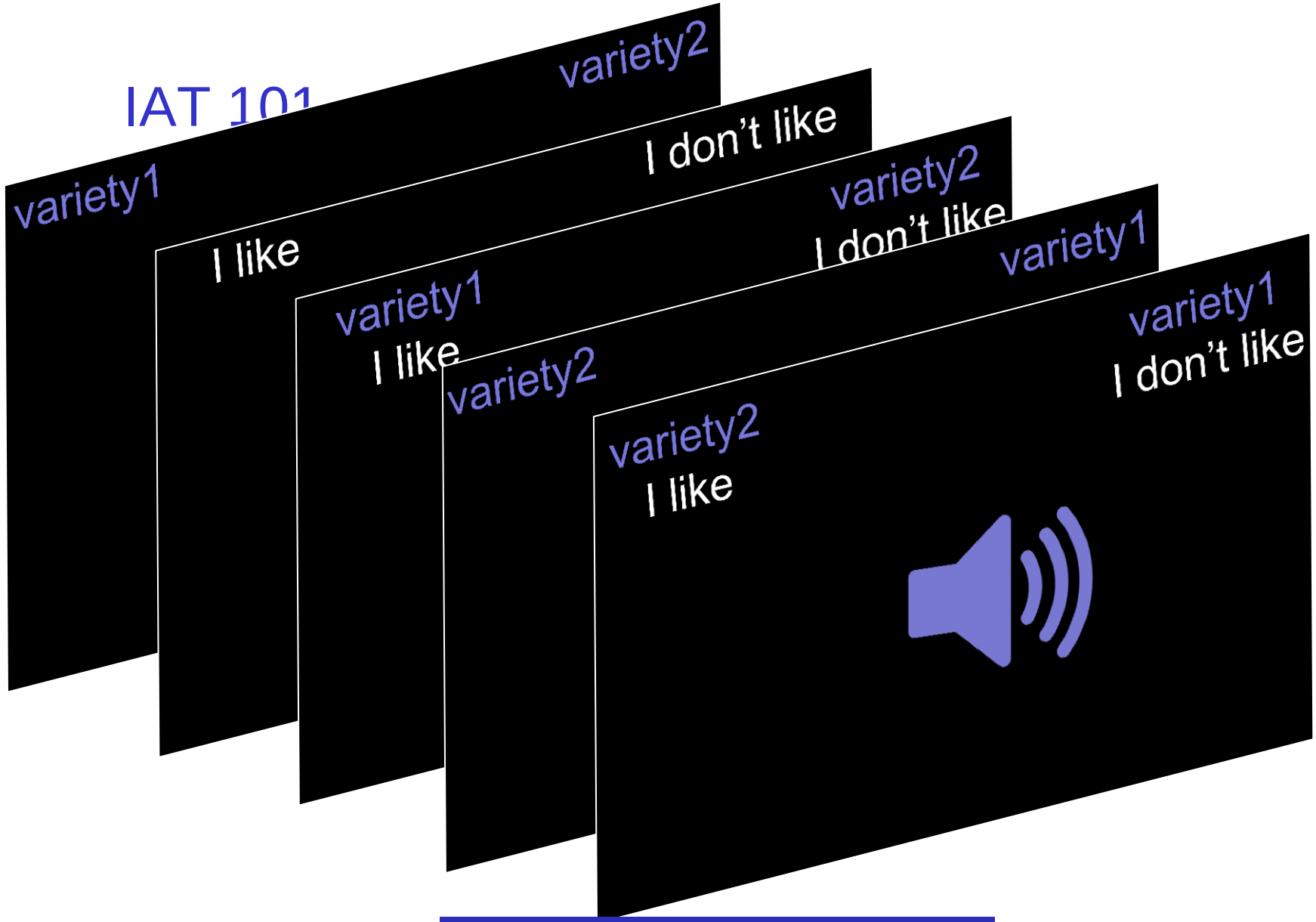
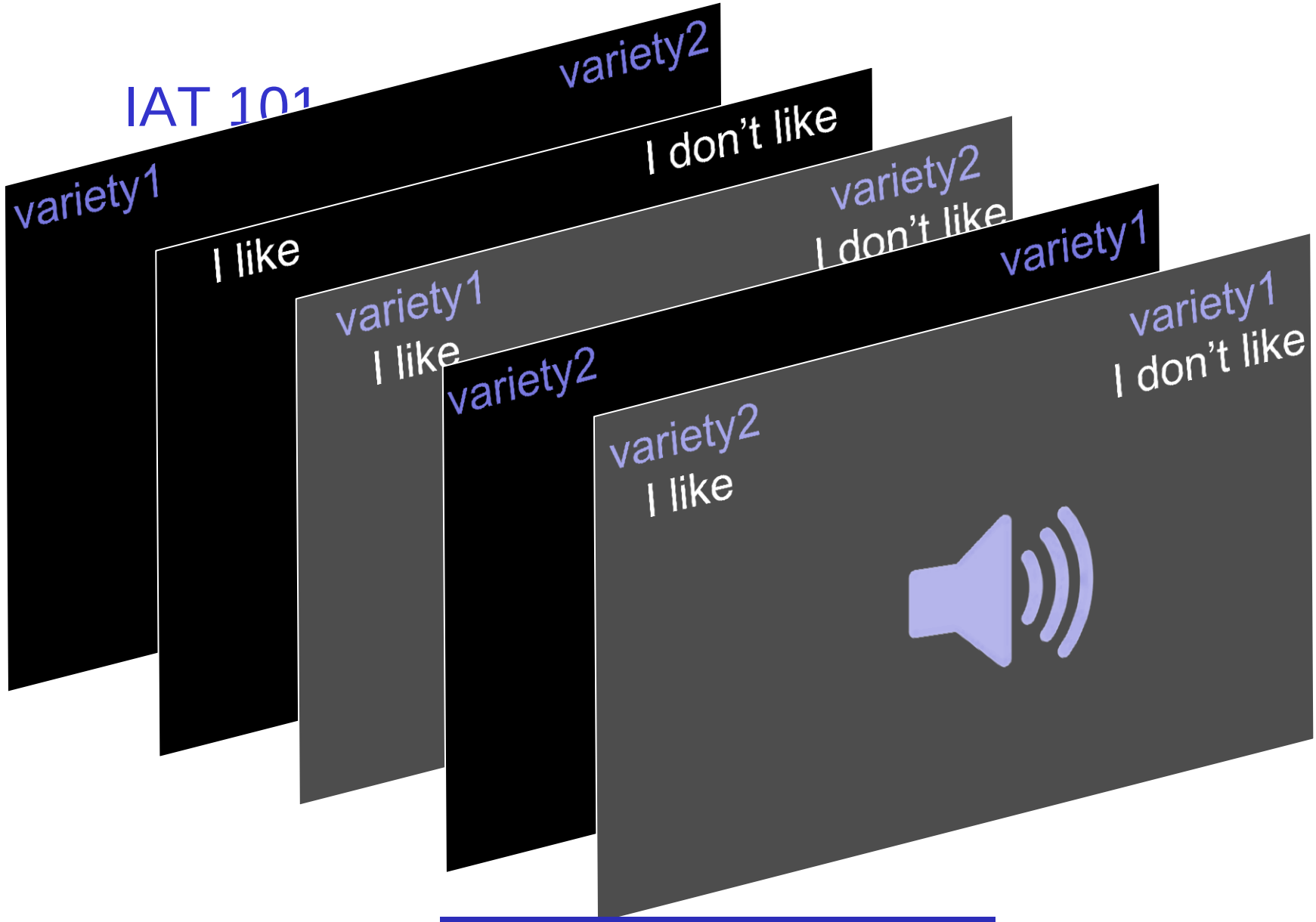
stimuli		

IAT 101



5 blocks of trials



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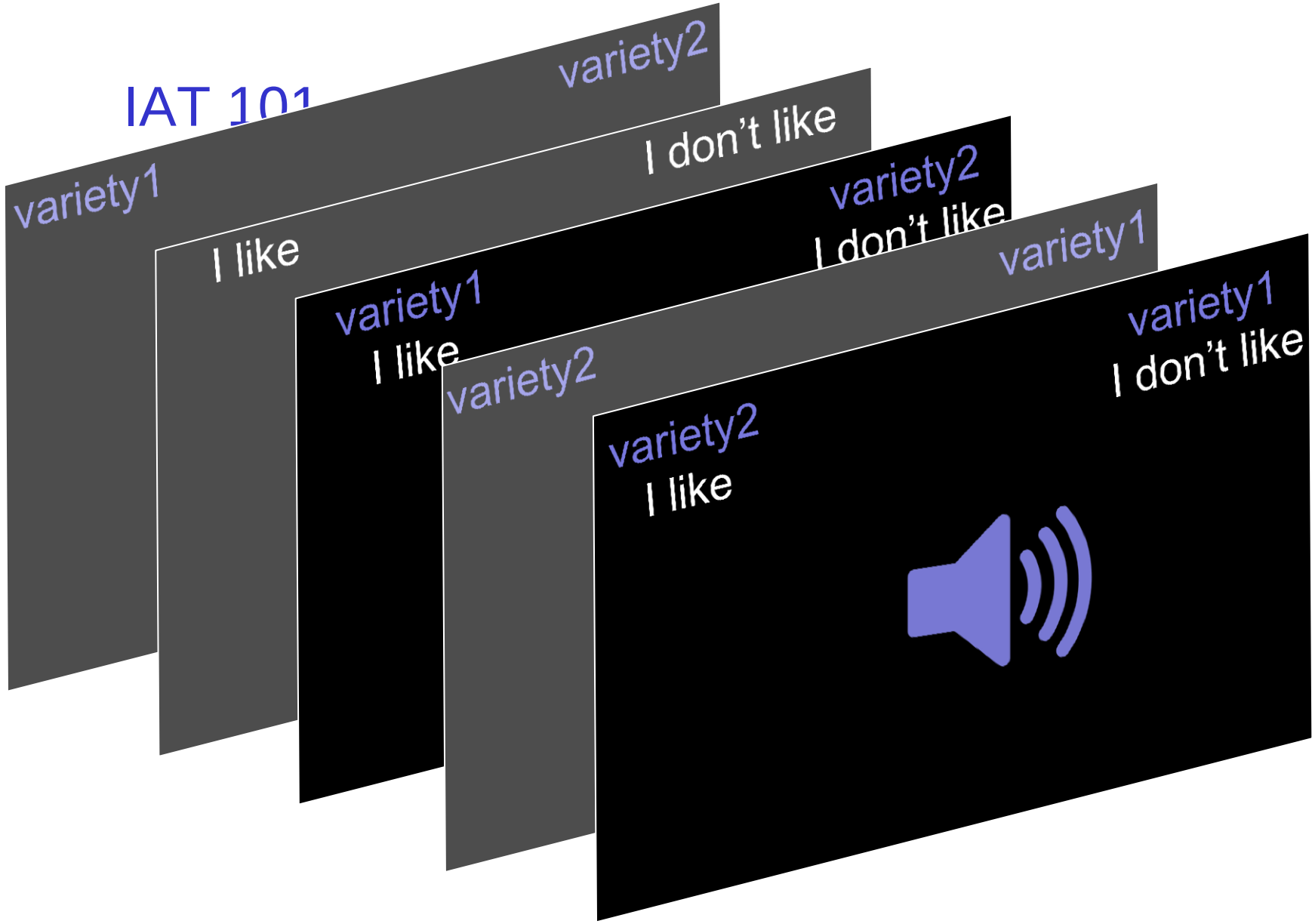
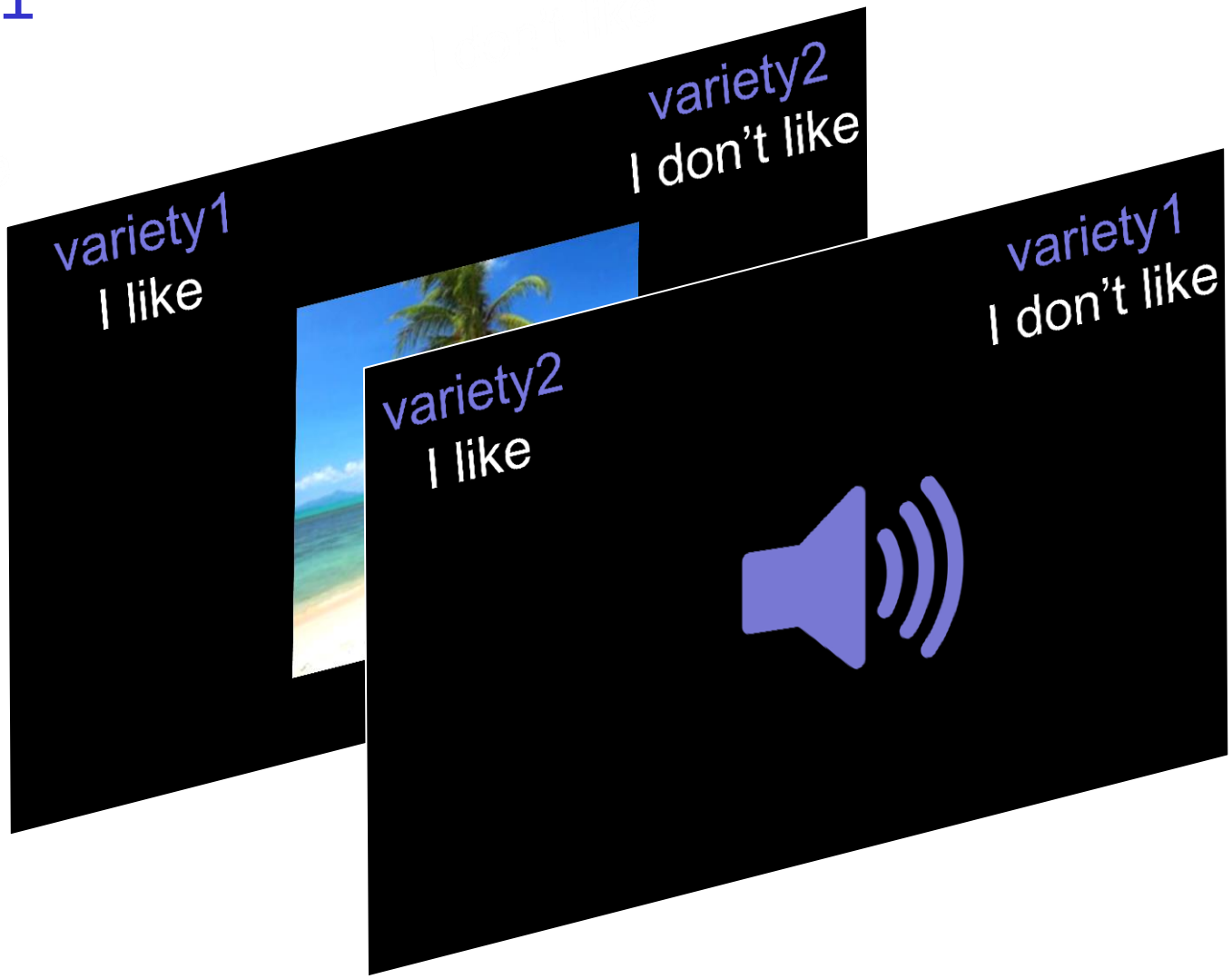


experimental blocks 3 & 5

IAT 101



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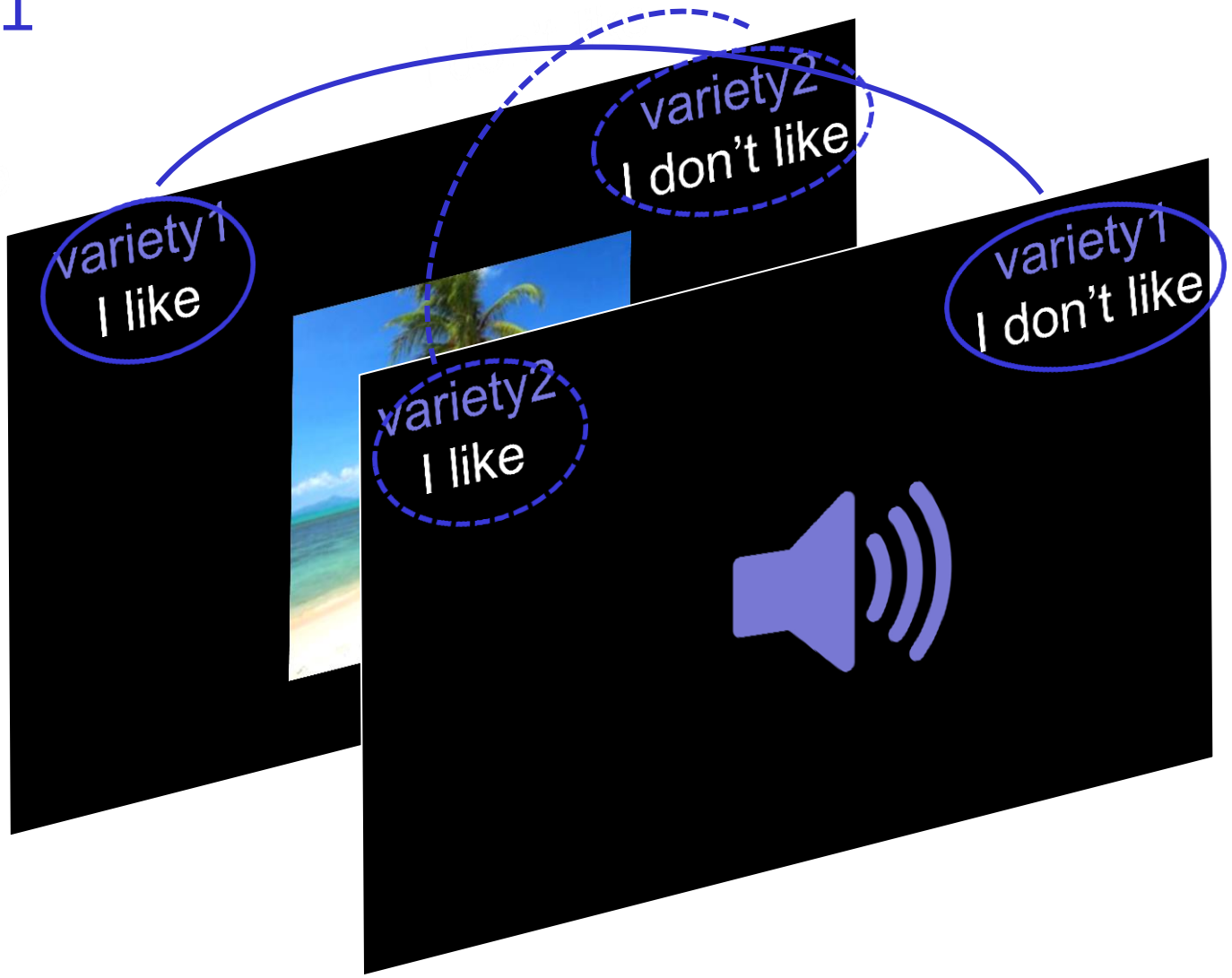

experimental blocks 3 & 5

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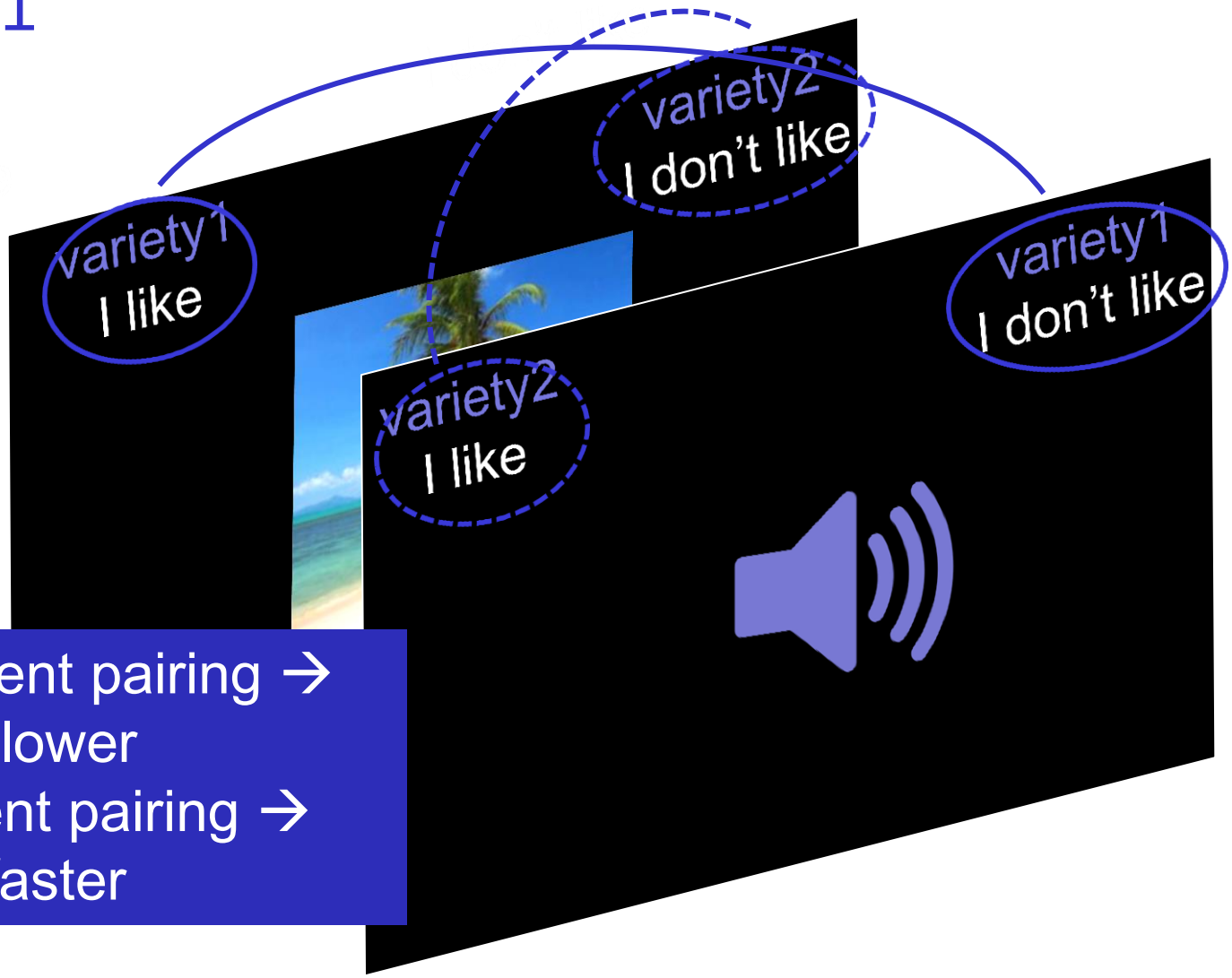
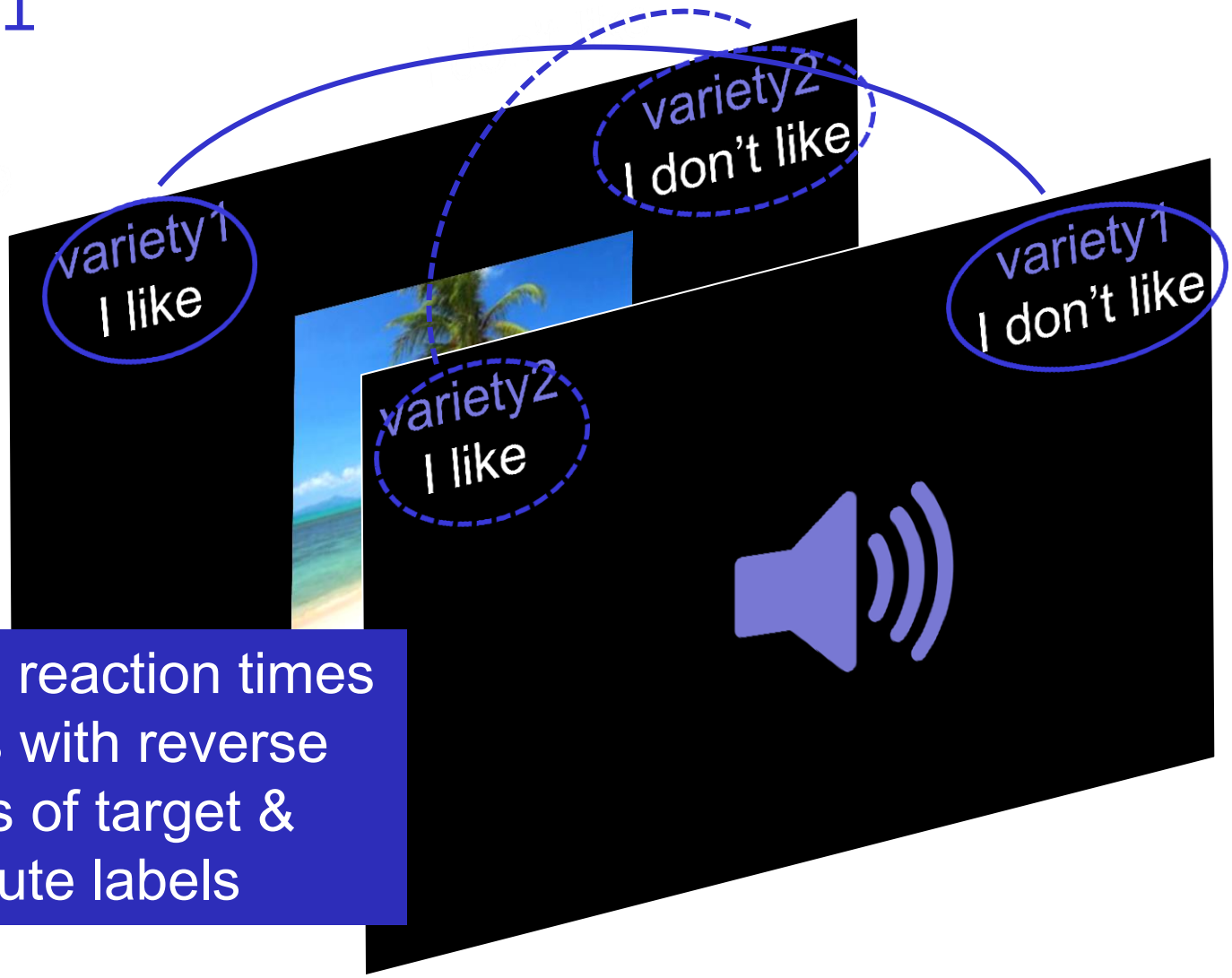


incongruent pairing → slower
congruent pairing → faster

experimental blocks 3 & 5

IAT 101



comparing reaction times in blocks with reverse pairings of target & attribute labels

experimental blocks 3 & 5

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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
  - …

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?

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

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- 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
      (Gschwedner et al. 2008, Wittenbrink et al. 2001, Uhlmann & Swanson 2004, Dasgupta & Greenwald 2001, Karpinski & Hilton 2001, but see Sherman et al. 2003 for an opposing view)

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

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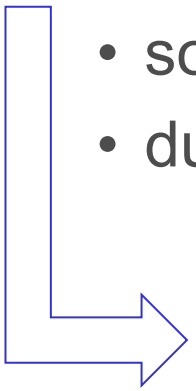

importing context possible for IAT as measure of LAs?

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case study: experiment design

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- 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

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  attitudes towards regional language variation in Dutch speaking Belgium are context dependent
  - standard Belgian Dutch (SBD) → formal situations
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  ~ production studies (Geeraerts & Van de Velde 2013)

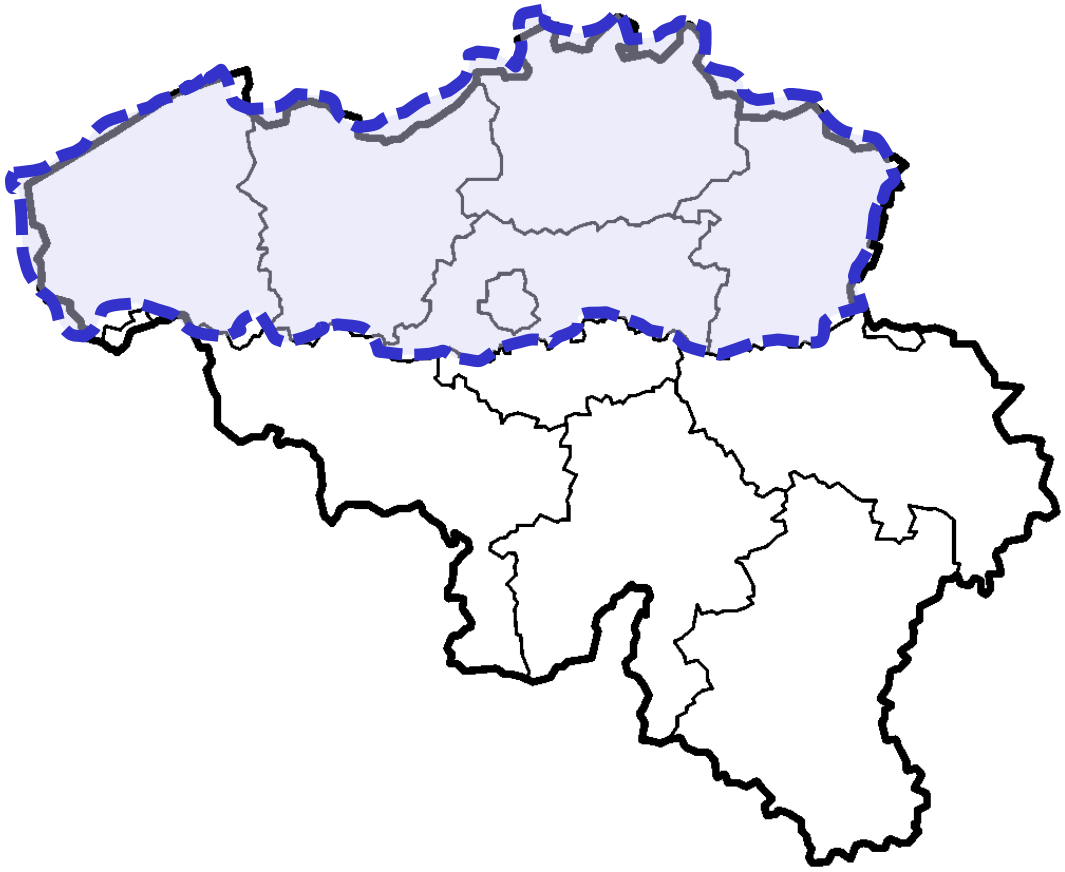
- → can we measure this variation using the IAT?

case study: experiment design

- target varieties:

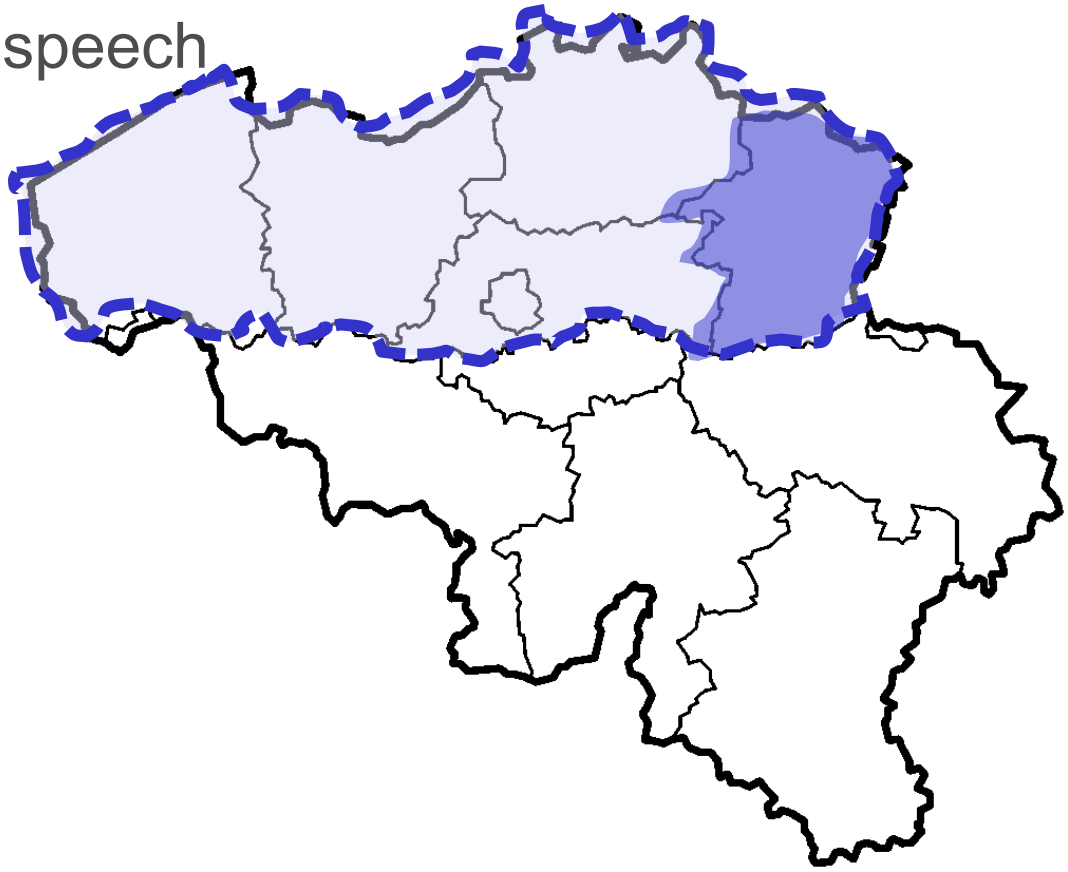
case study: experiment design

- target varieties:
  - SBD accented speech



case study: experiment design

- target varieties:
  - SBD accented speech
  - Limburg accented speech



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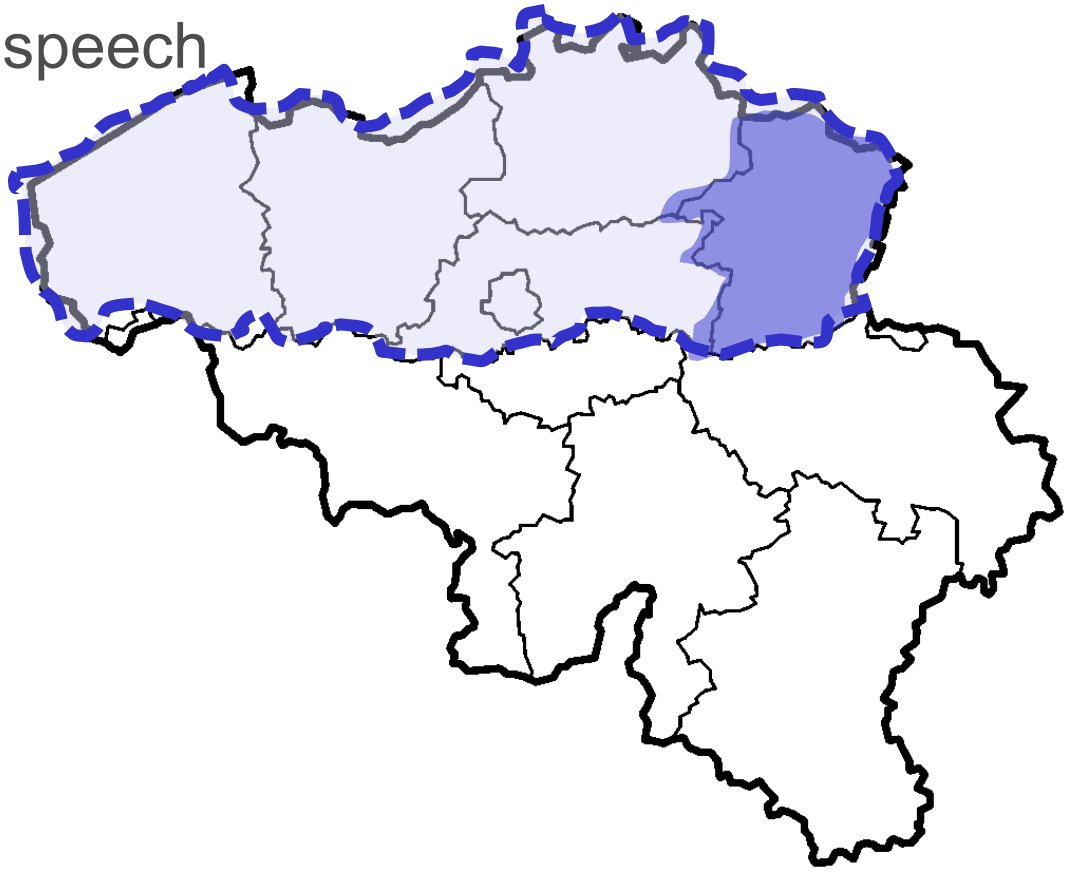

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- target varieties:
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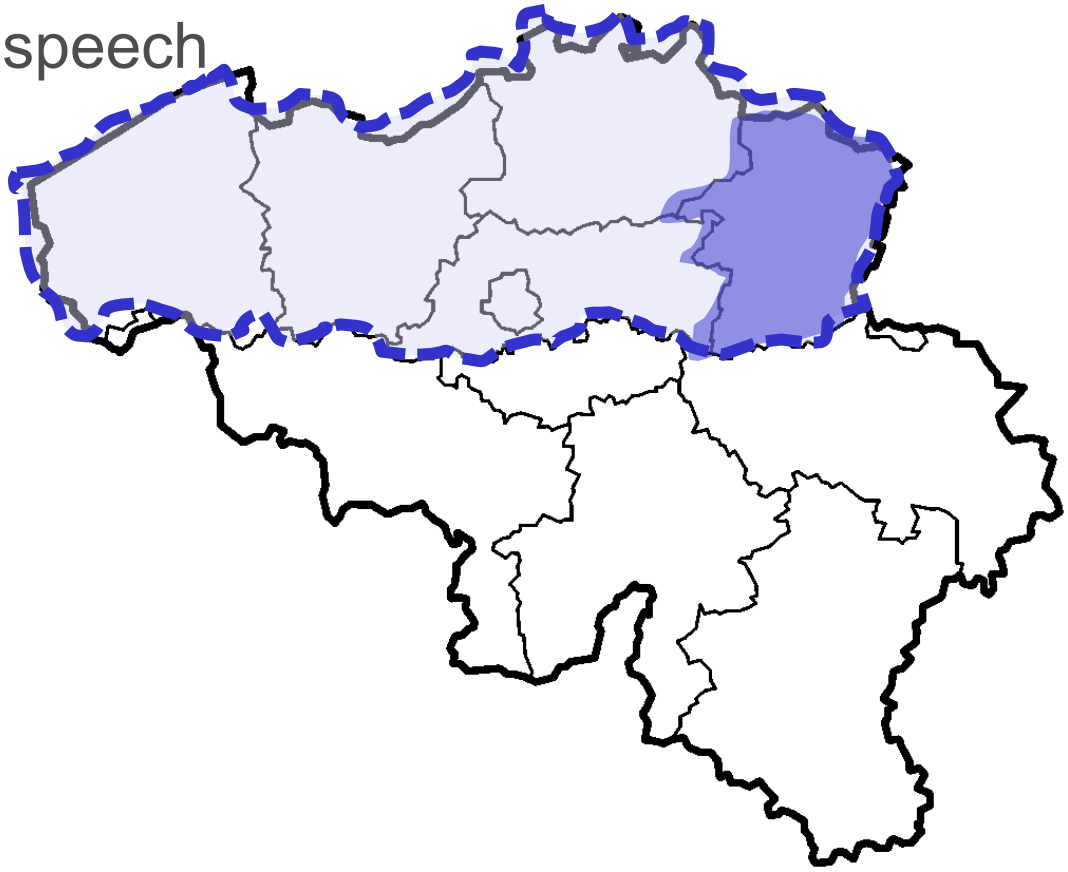
- participants:
  160 Limburgian



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- target varieties:
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- participants:
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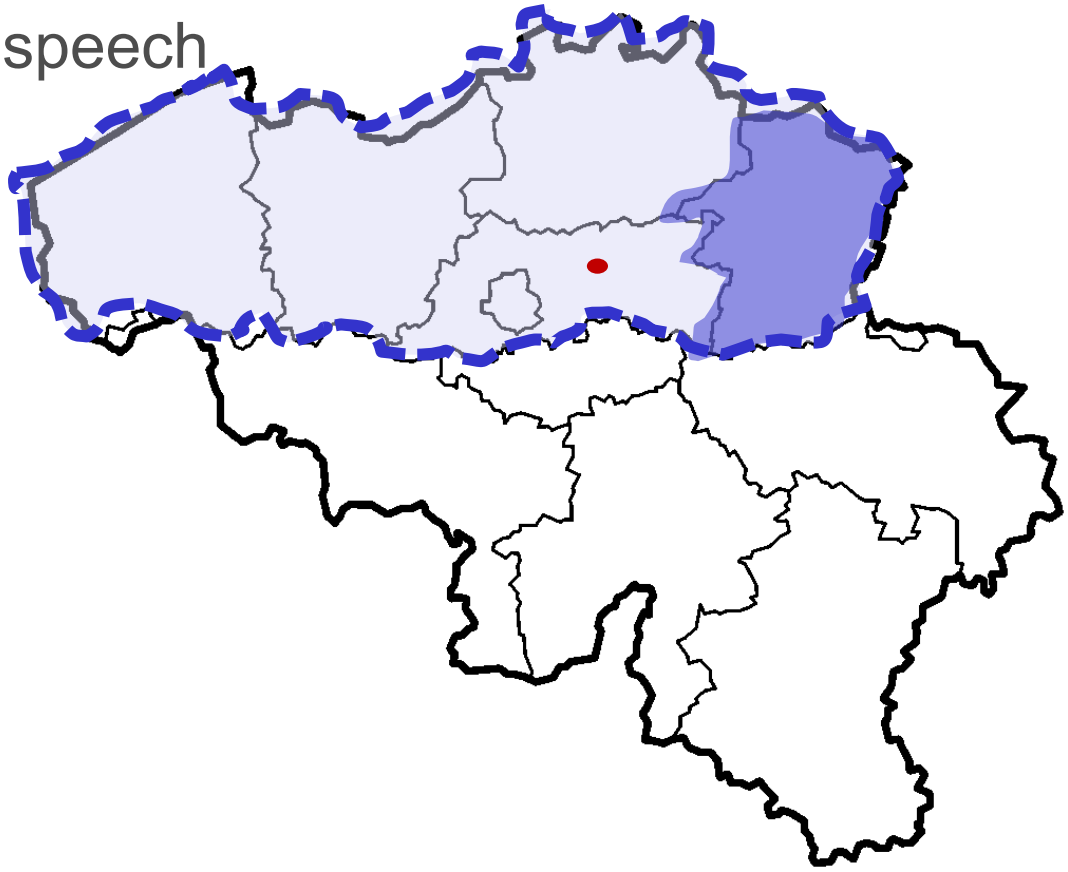
  students in Leuven



case study: experiment design

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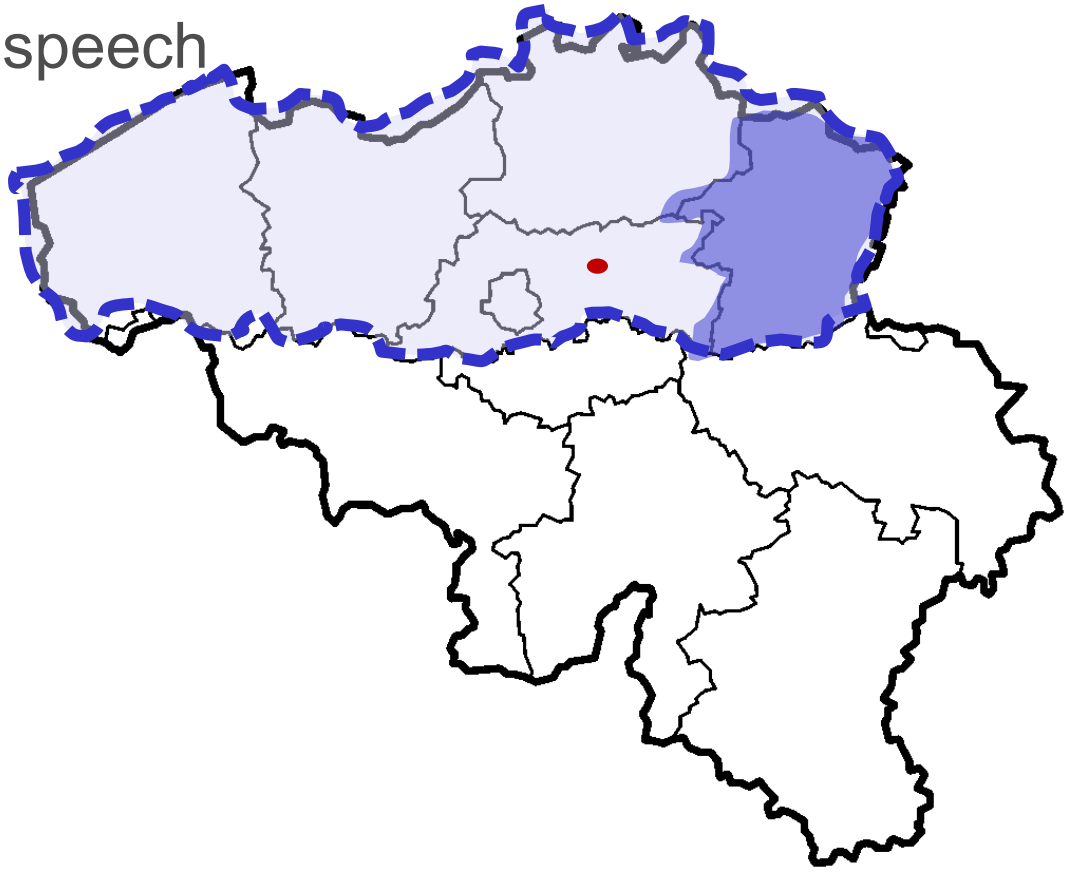
M_{age} = 20.96
gender → 55% f



case study: experiment design

- two manipulations:

case study: experiment design

- two manipulations:
  - context: formal vs. informal

case study: experiment design

- two manipulations:
  - context: formal vs. informal
  - context presentation:
    background image vs. multiple images between blocks

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  - context: formal vs. informal
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case study: experiment design

	background picture								slides							
	block order 1		block order 2		block order 1		block order 2		block order 1		block order 2		block order 1		block order 2	
	for	inf	for	inf	inf	for	inf	for	for	inf	for	inf	inf	for	inf	for
# participants	a 20		b 20		c 20		d 20		e 20		f 20		g 20		h 20	

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 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 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 positief

- demographic information

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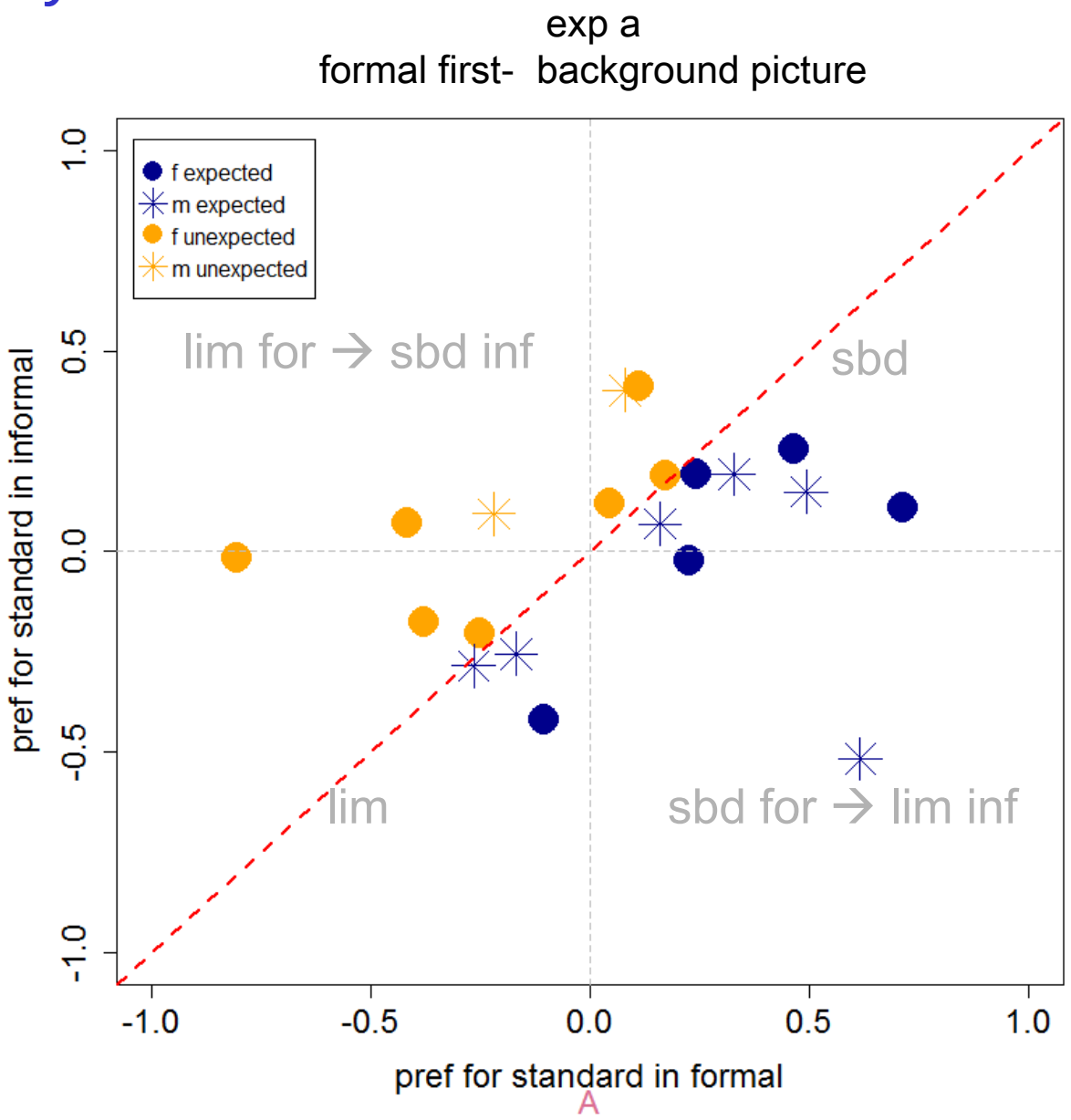
case study: results

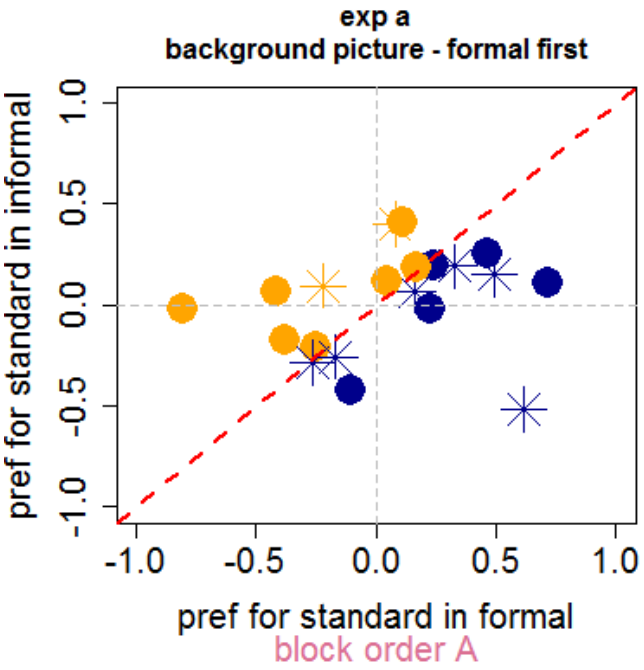
- P-IATs

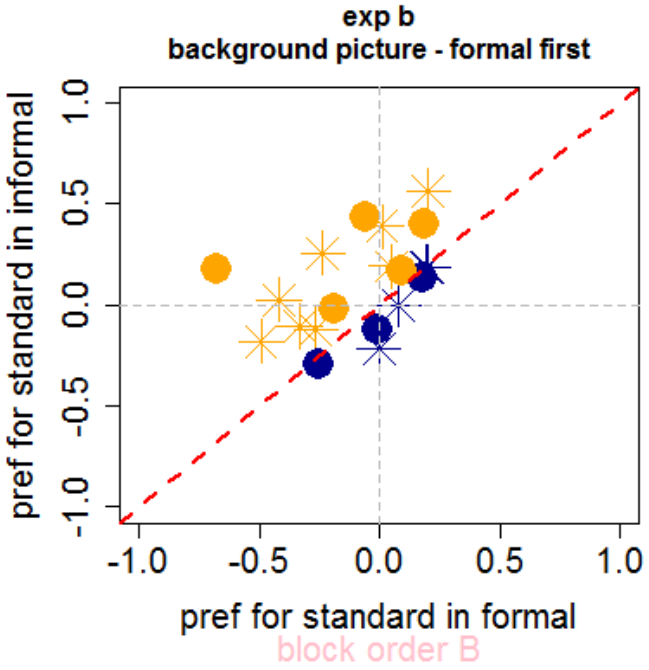


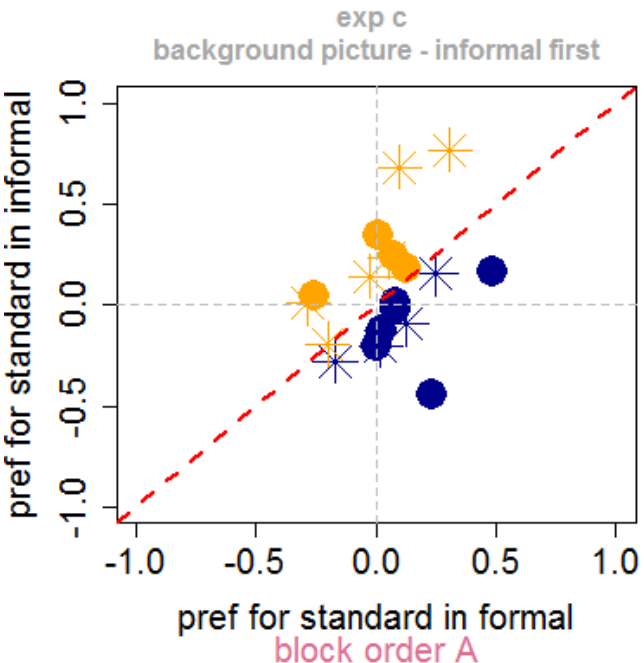
case study:

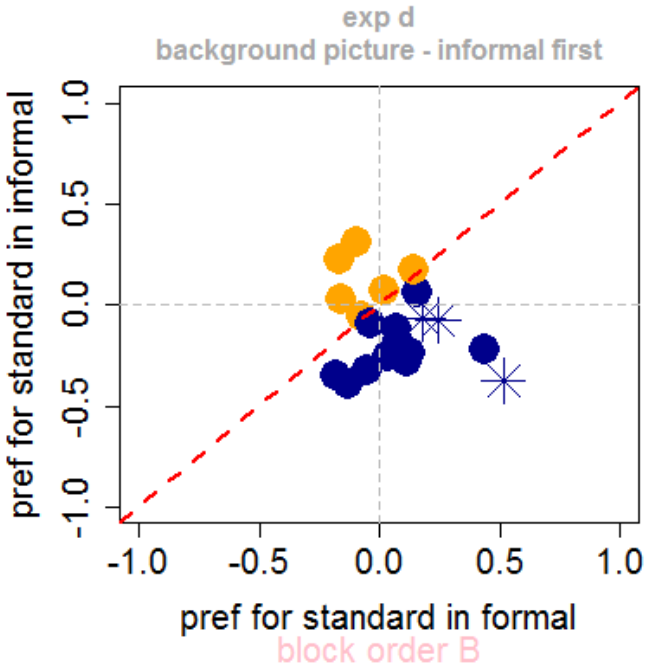
- P-IATs

background picture





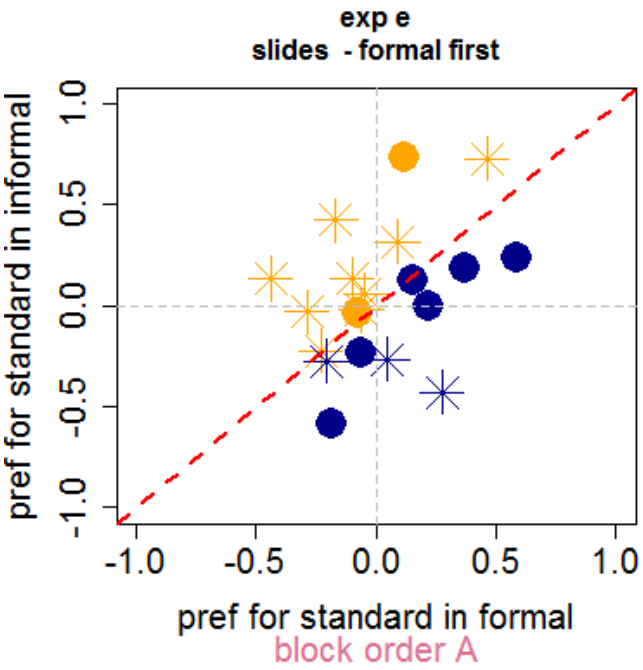


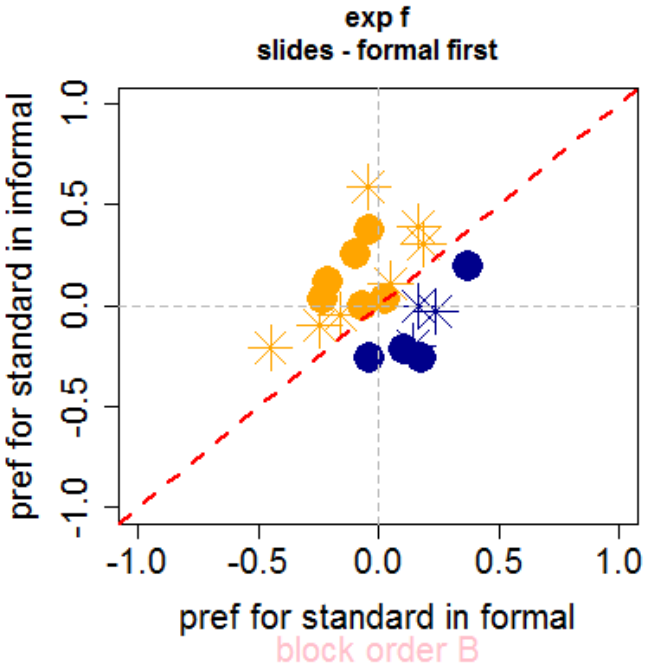


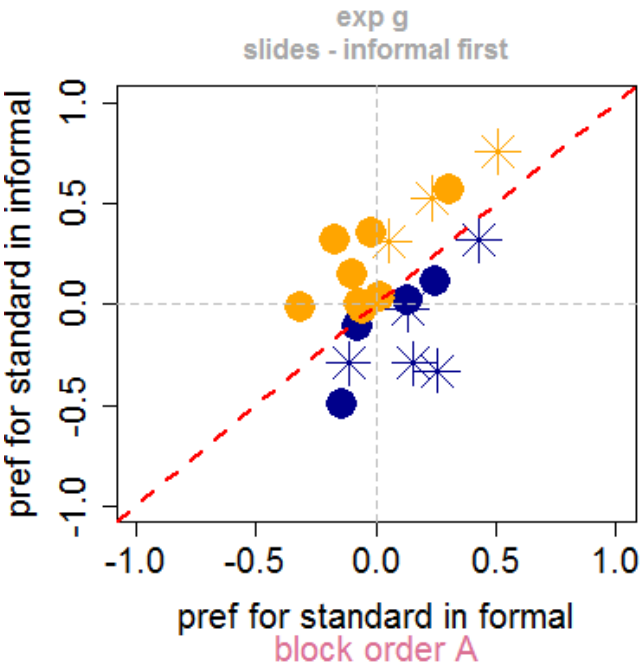
case study:

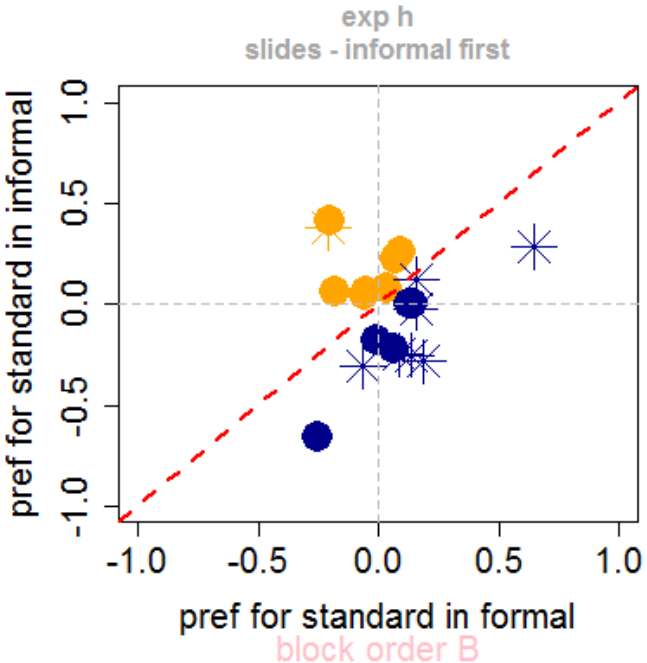
- P-IATs

sequence of pictures before each block of IAT



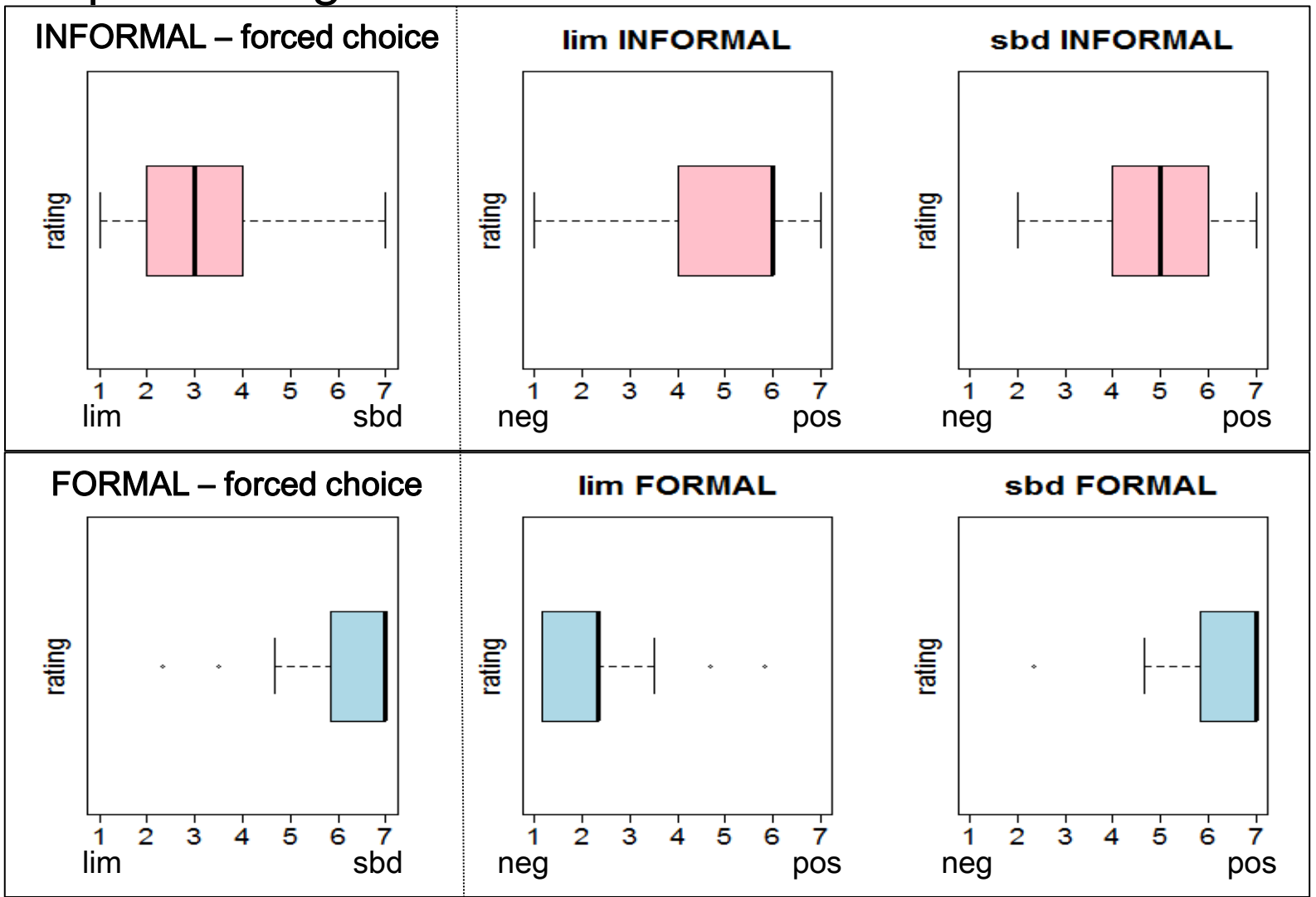






case study: results

- explicit ratings



case study: results

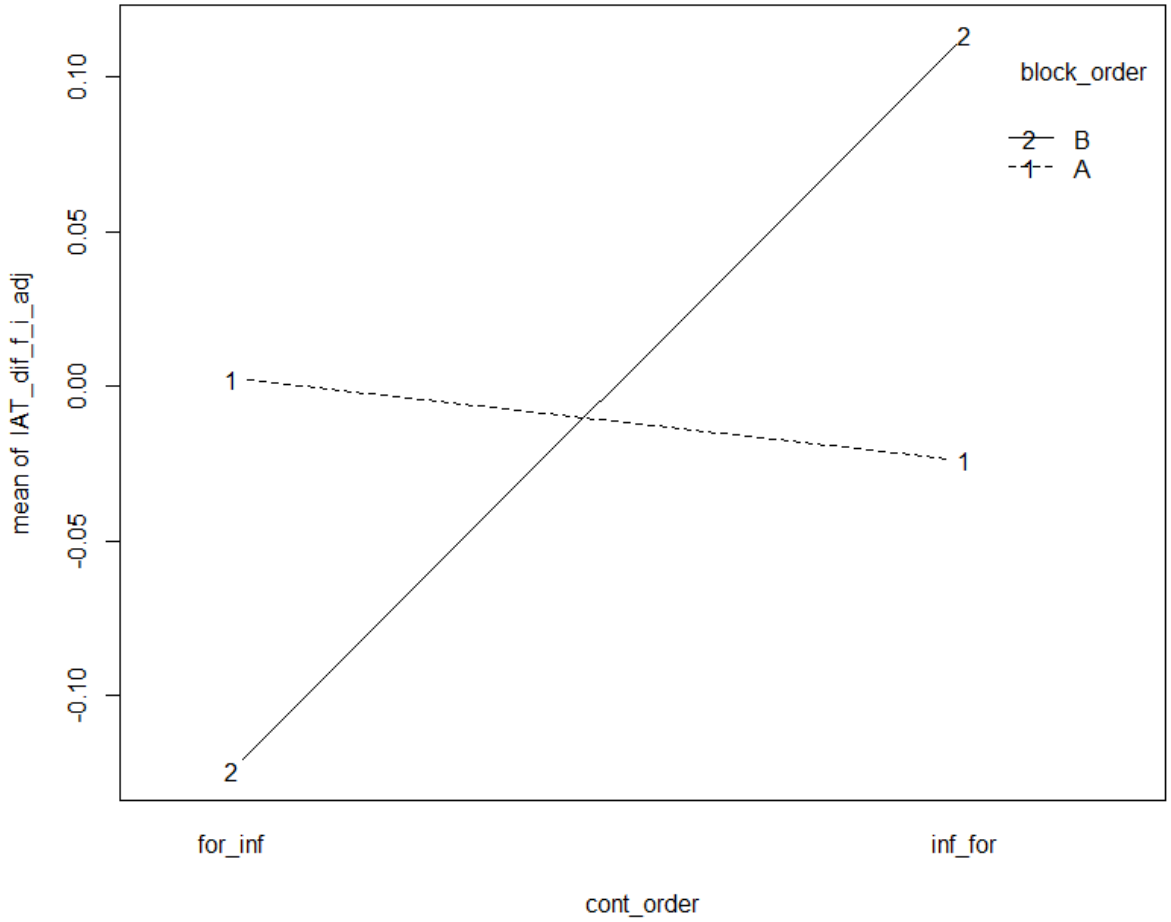
linear regression

predictor	estimate	Pr(> | t |)	
(intercept)	0.09	0.095	.
context order (for_inf)	-0.054	0.032	*
context type (bg)	0.006	0.819	n.s.
block order (A)	-0.002	0.934	n.s.
explicit rating - lim in formal context	-0.041	0.042	*
context order : block order	0.063	0.013	*

dependent variable = context effect

case study: results

linear regression: interaction



case study: results

- why do we find a context effect for some participants, but not for others? → ambivalence? (Petty & Briñol 2009)

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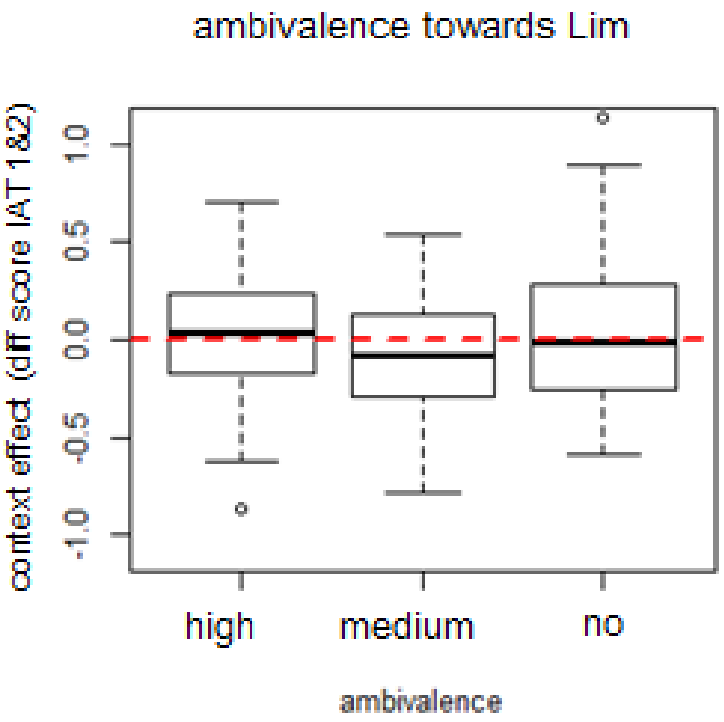

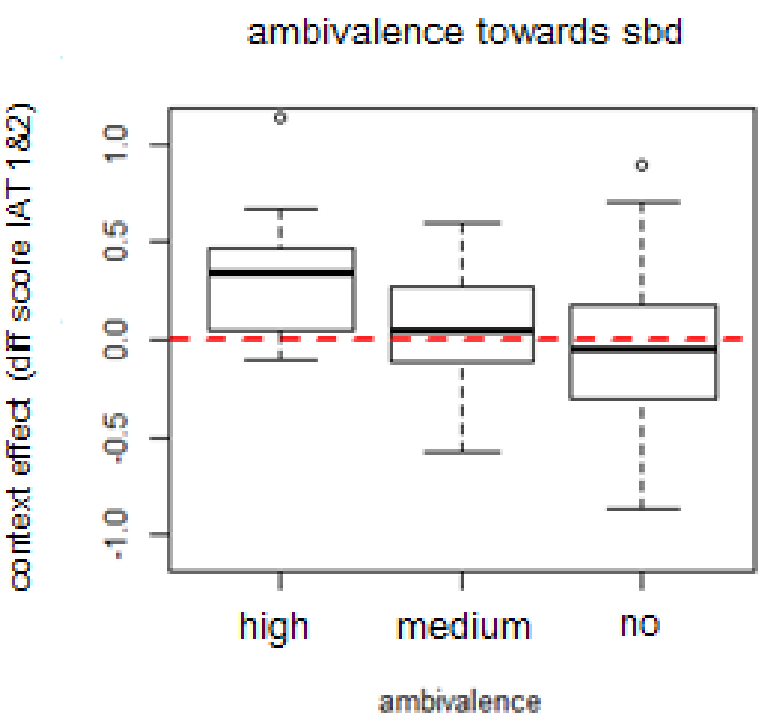

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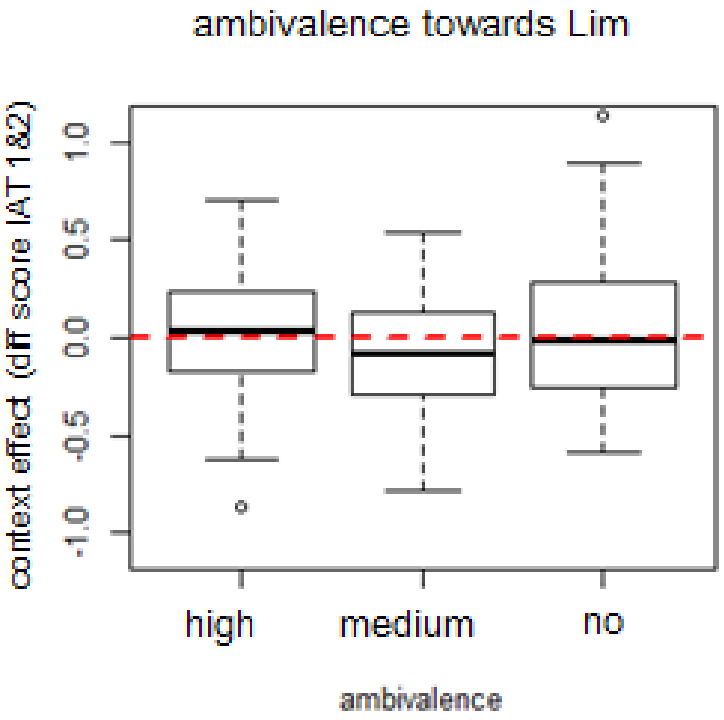

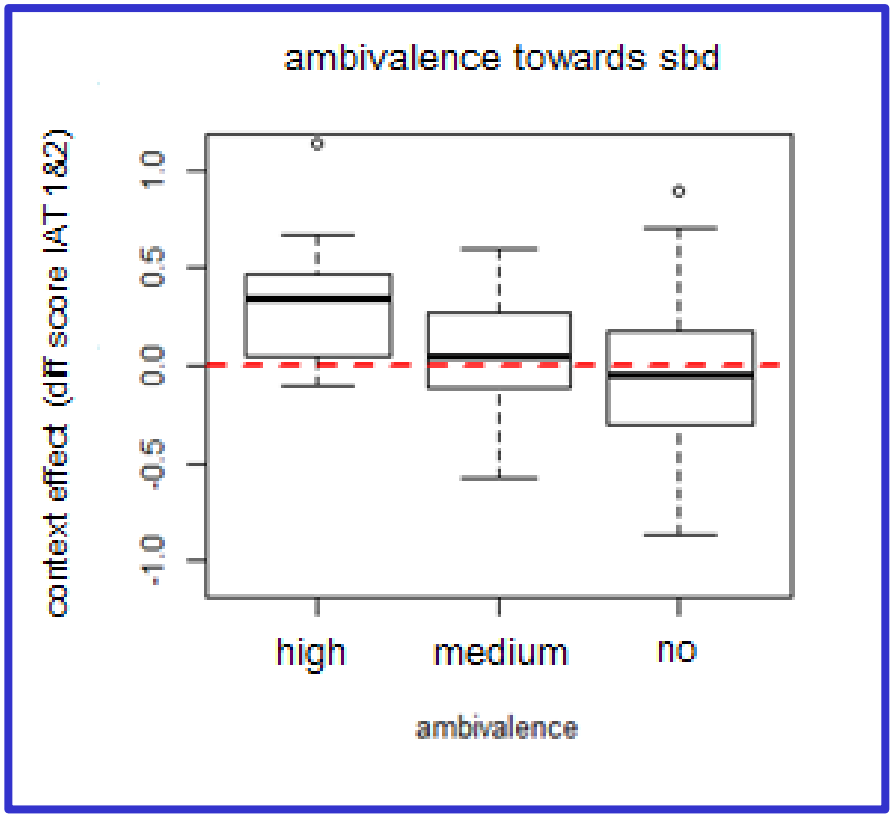

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case study: discussion

- no context effect… what to make of this?

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  - IAT not context sensitive?
  - refining of experimental set up
  - need for conceptual refinement

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    impossible to conclude based on current results
    +
    <-> social psychological literature
  - refining of experimental set up
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    introduction of a neutral baseline condition
  - need for conceptual refinement

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    asymmetry in context effect

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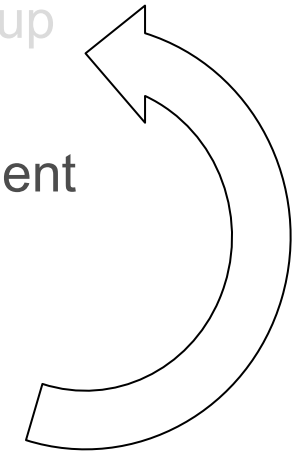
    asymmetry in context effect

    adapt experiment design



thank you!

for further information:

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http://wwwling.arts.kuleuven.be/qlvl/laura

references

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