

# The impact of acquisition context on the affective perception of swear words

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## Background

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- Bilinguals report that their second language as less emotional<sup>1</sup>, cannot swear cathartically in it as compared to their first<sup>2</sup>.
- Bi-dialectals have different patterns of use for taboo words, but retain taboo understanding regardless of use<sup>3</sup>.
- Late Positive Component (LPC): Explicit, emotional processing<sup>4</sup>.

### Research Question

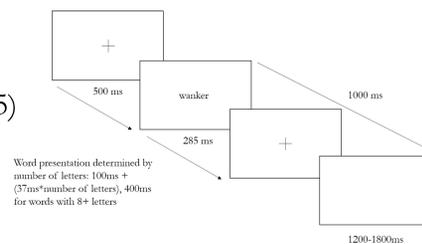
Can the affective perception of words be influenced by the context in which they are acquired, even within L1?

## Methods

- Participants: Native speakers of American English (N=25, age: 18-21, cis-female: 14; cis-male: 11; right handed: 23)
- Materials: 30 American Taboo words (AT), 30 British Taboo words (BT), 30 negative words, 30 positive words, and 120 neutral words
- Norming studies: Native speakers of American English (N=63) and British English (N=63) participated in the norming of

- Valence (Scale 1-9)
- Arousal (Scale 1-9)
- Taboo (Scale 1-9)
- Comprehension (Scale 1-5)

Right: Example of stimulus presentation for the lexical decision task



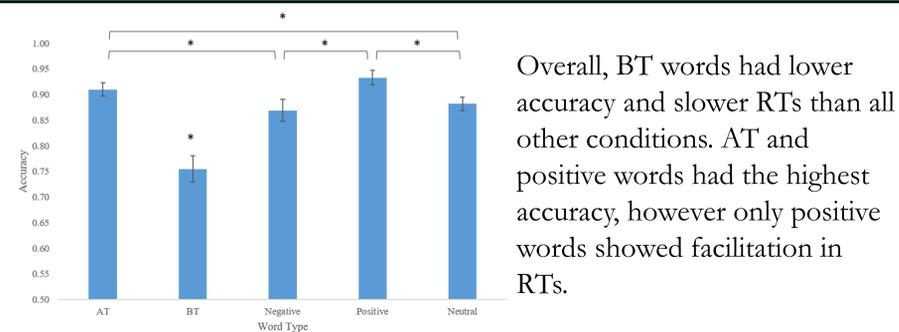
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## Methods: Stimuli

Native Dialect	Rating	American Taboo	British Taboo	Negative	Positive	Neutral
	Example	slut	wanker	mangy	giggle	salute
American	Valence	3.7	3.8	3.9	6.8	5.2
	Arousal	5.0	4.6	5.0	5.0	4.8
	Taboo	5.9	4.2	1.8	1.6	1.7
	Comprehension	4.5	3.7	4.4	4.5	4.4
British	Valence	3.7	3.8	3.9	6.8	5.2
	Arousal	3.0	2.6	2.5	3.5	2.6
	Taboo	4.9	4.2	2.1	1.7	1.7
	Comprehension	4.5	4.5	4.2	4.5	4.3

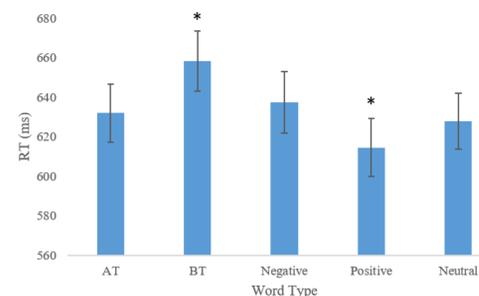
## Behavioral Results



Left: Average accuracy for each category of words in LDT.

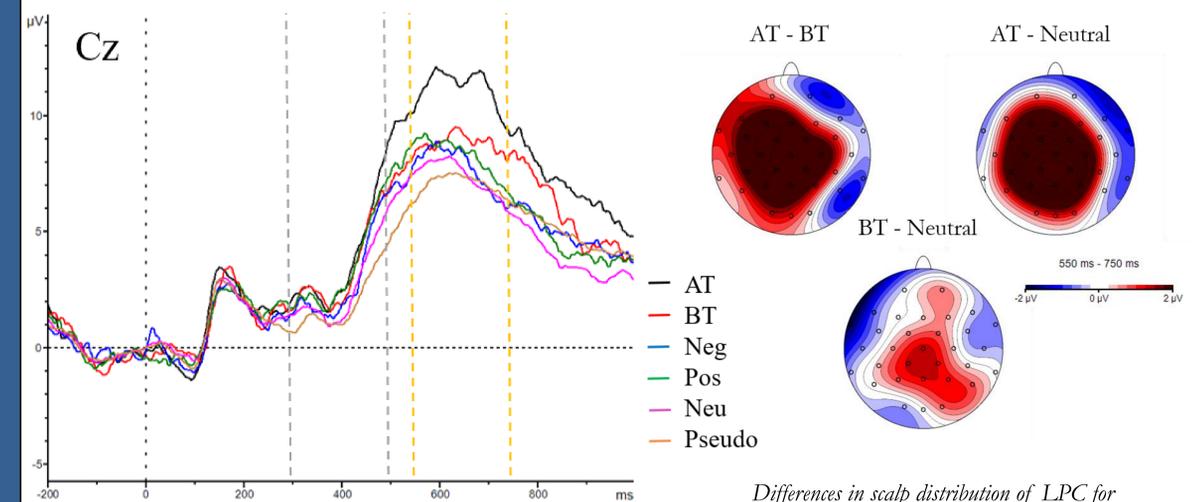
Right: Average RT for each category of words in LDT.

\*significantly differ from all other categories.



## ERP Results

RM-ANOVA of resulting ERPs showed that American taboo words showed an increased amplitude of the late positive complex (LPC) as compared to all other categories of words. British taboo words did not differ significantly from any category of non-taboo words.



Shows differences in amplitude of LPC (yellow, dotted lines) for AT vs other conditions, and differences in N400 (gray, dotted lines) for pseudowords vs other conditions

Differences in scalp distribution of LPC for three conditions (AT, BT, and neutral).

## Discussion and Conclusions

- Social context is required to acquire a complete understanding of a word and alters the affective perception of said word.
- Contextual interaction matters for word learning
  - While taboo words from the native dialect showed differences in later, explicit language processing, words from the non-native dialect that were still considered taboo showed no difference in processing from non-taboo words.
  - That is, despite knowing that the word *wanker* is offensive, speakers of American English do not process it the same way as a word like *asshole*
- Similarities in N400 confirm that despite being non-native BT words are still processed as words.

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