



Processing emotion and tabooeness in a native vs. a second language: an ERP study

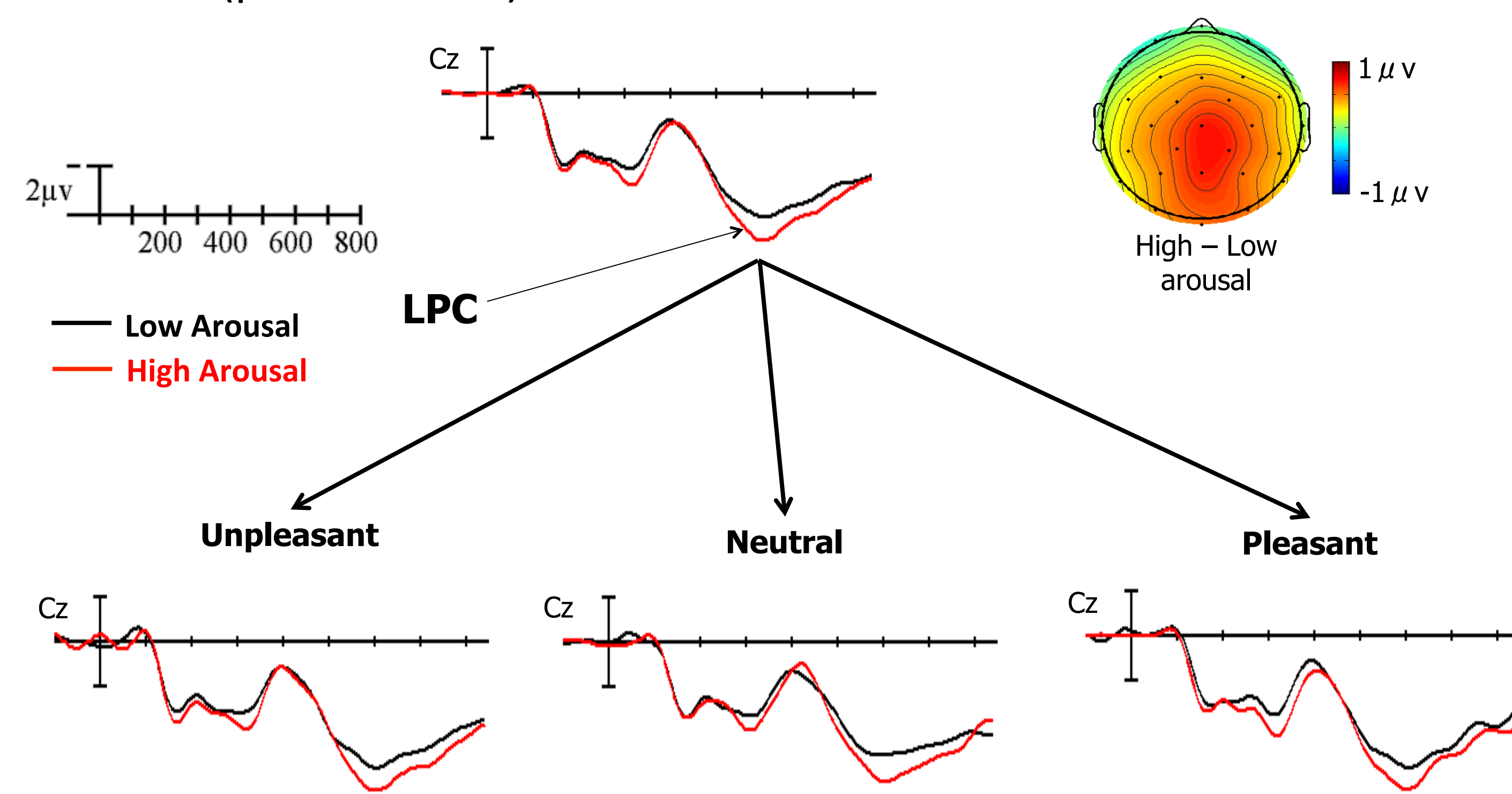


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Introduction

- There is an intuitive sense that words in a second language (L2) have less emotional impact than words in a native language
- It is reported to be easier to swear and to produce taboo words in L2
- Studies of skin conductance responses (SCRs) have shown decreased autonomic arousal in response to emotional and taboo words in L2
- Taboo words are highly arousing and provoke strong emotional responses
- Previous findings have shown that the Late Positive Component (LPC) is responsive to a word's level of arousal (intensity) regardless of its valence (pleasantness):



Predictions:

Experiment 1: Highly arousing items will elicit a greater positivity than low arousal items in native English speakers, while this difference will be smaller in L2 English speakers.

Experiment 2: Taboo items will elicit an LPC resembling that seen to highly arousing items in native English speakers; this effect will be diminished in L2 English speakers.

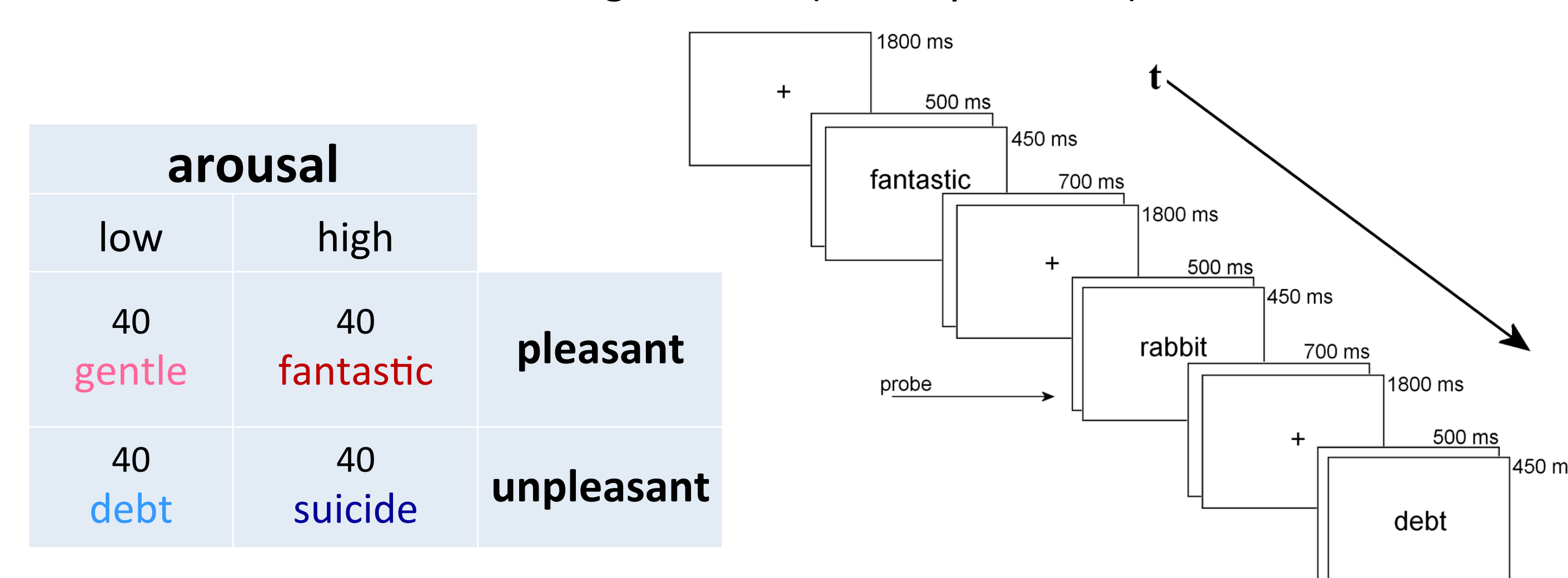
Methods and Procedures

Experiment 1

Participants: 16 native monolingual English speakers
16 L2 English speakers: learned at mean age of 5.3

Stimuli: 160 English words crossed in levels of valence and arousal (40 per category)
80 neutral words (40 controlled for valence, 40 filler items)

Task: Semantic categorization (identify animals)



Experiment 2

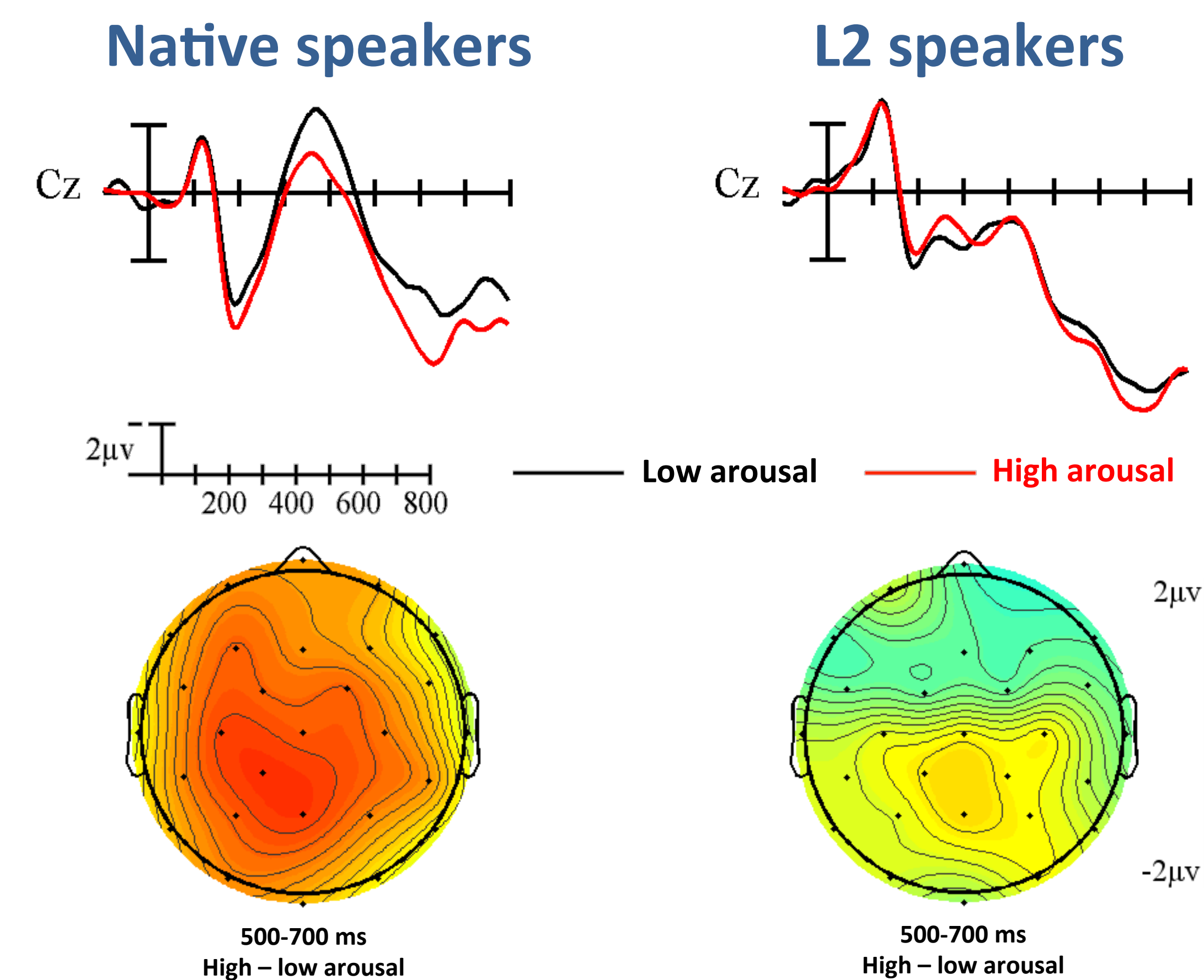
Participants: 16 native monolingual English speakers
16 late L2 English speakers: learned at mean age of 8.2

Stimuli: Same items from Experiment 1
47 taboo words (e.g. "fuck" "asshole" "penis")

Task: Same task as Experiment 1
After ERP session: rated critical items for tabooeness on 1-7 scale

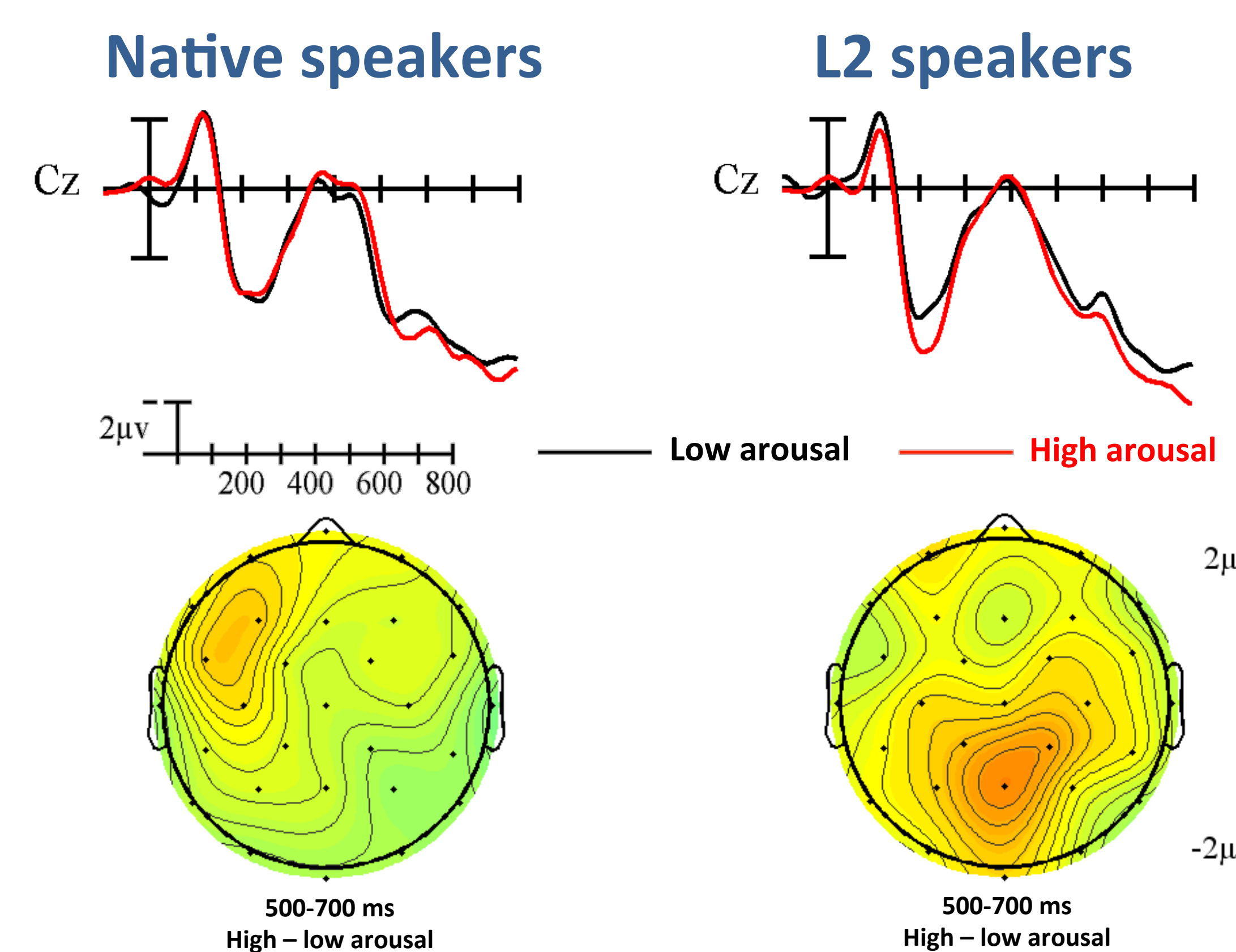
Results: Arousal

Experiment 1: no taboo words



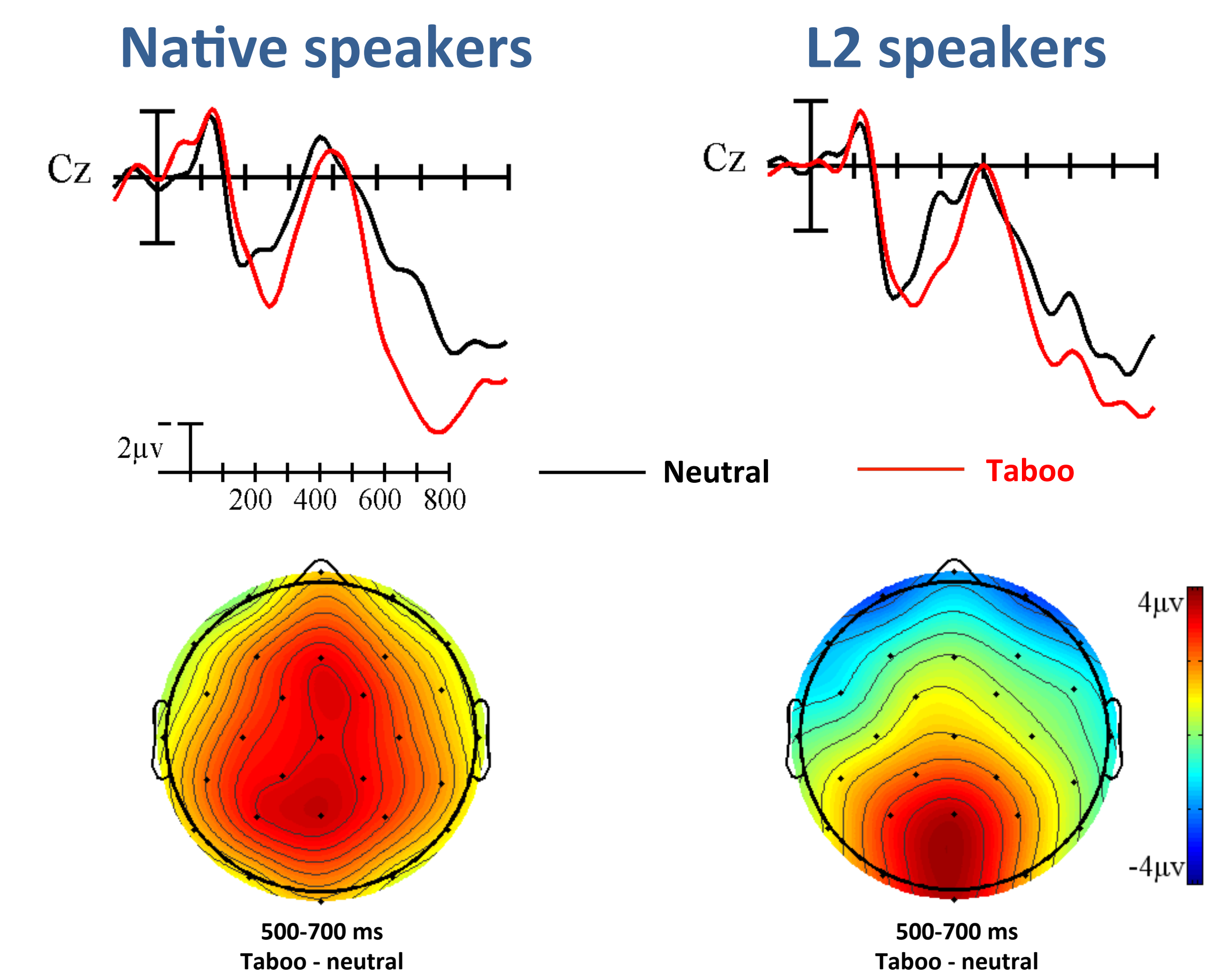
- Arousal has a significant effect on the LPC in native English speakers but not in L2 English speakers.

Experiment 2: taboo words present



- When taboo words are present in the paradigm, arousal effects to highly arousing nontaboo words are not observed in either group.

Results: Taboo



- Taboo words elicit a robust and widely distributed LPC in native English speakers; this effect is restricted in L2 English speakers.

Behavioral

Average tabooeness ratings of items in the taboo condition:

- Native speakers: 5.0
- L2 speakers: 4.1 ($p < 0.001$)

Conclusions

- Emotional and taboo words are experienced as less arousing in L2 than in a native language
- Arousal may be experienced relative to local context
- Future studies could determine which aspects of language experience- such as age of acquisition, learning environment, or proficiency- impact emotionality

References

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