

2136 Syntactic adaptation to native versus non-native speech

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Variation in language ubiquitous, including **native vs. non-native speech** (Cheng, 1999; Tagliamonte & Smith, 2005; Weiner & Labov, 1983)

- e.g., more non-native than native speakers of English (Crystal, 2003)
- Non-native speech contains more errors and is more variable (Birdsong & Molis, 2001; Flege, 2005)

How does this affect **syntactic (& other) language processing**?

Relevant to theories of **why syntactic priming** occurs (Pickering & Ferreira, 2008)

- > **Implicit learning** about linguistic environment
 - > Predicts more learning from native speaker (reliable feature) than non-native speaker (possible error)
- > **Residual activation** of structure representations
 - > Not clear that native vs. non-native speech should differ

METHOD

N = 66 college undergraduates, native English speakers

Materials: English sentences rated as marginally grammatical in prior norming (Luka, p.c.)

- Prime-target pairs with same syntactic structure but no content word overlap
- Prime / target status counterbalanced across experimental lists

PRIME: "The critic yawned his disdain."

TARGET: "The asthmatic wheezed his discomfort."

Each item recorded by both **NATIVE English speaker** and **NON-NATIVE (L1 Romanian) speaker**

- Both female

PROCEDURE

Adapted from Luka & Choi (2012)

NATIVE EXPOSURE PHASE

- 1) Listen to sentence from native speaker



"The critic yawned his disdain."

- 2) Retype sentence

- 3) Rate grammaticality (1 to 7 Likert scale)

Repeat for 15 sentences

NON-NATIVE EXPOSURE

15 different sentences from non-native speaker



"What Emily is thankful for is that she is here."

18 MIN. DISTRACTOR TASK

(mental rotation)

NATIVE TEST PHASE

- 1) Listen to sentence from native speaker

PRIMED



"The asthmatic wheezed his discomfort."

UNPRIMED

"Marissa cleared Kelly some space."

- 2) Rate grammaticality

Repeat for 15 primed, 15 unprimed structures

NON-NATIVE TEST PHASE

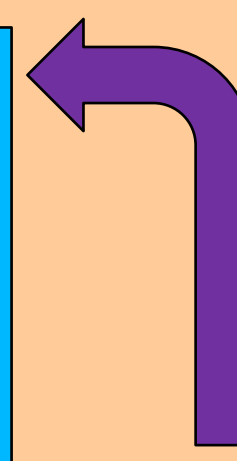
PRIMED



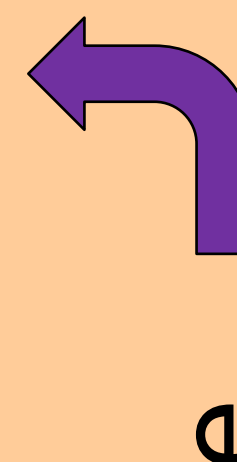
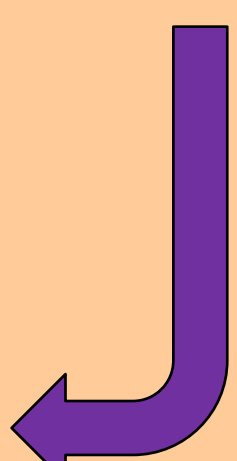
"What Cole is upset about is that they're not home."

UNPRIMED

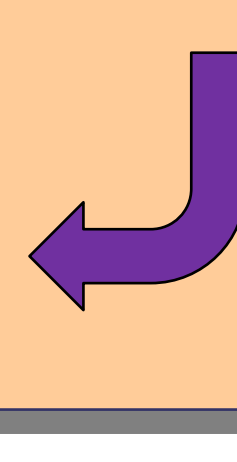
"No munching of cupcakes occurred."



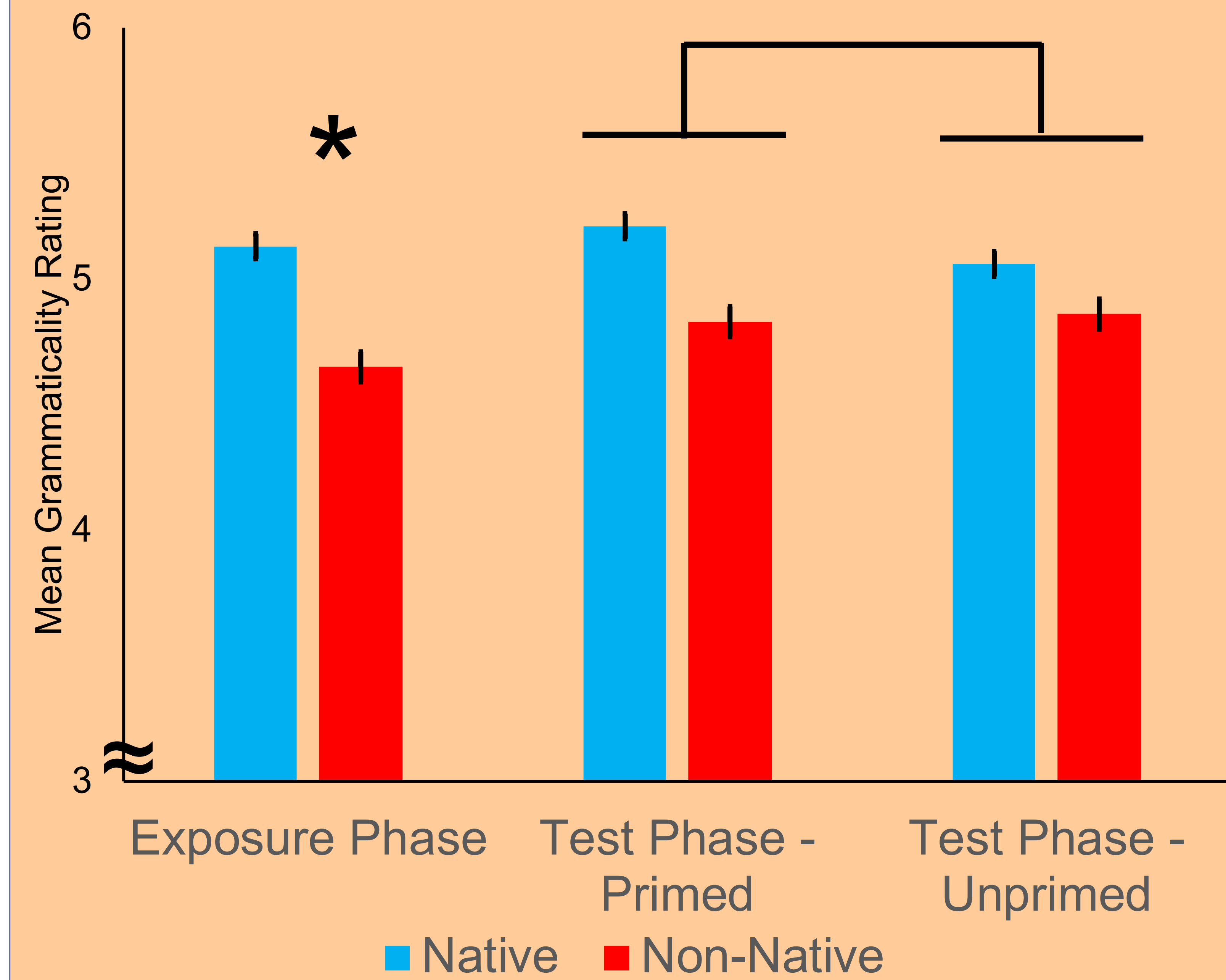
Order counterbalanced



Same order as exposure phase



RESULTS



- > **Native speaker** perceived as more grammatical
- > Despite same sentences
- > Primed structures rated as more grammatical than unprimed... but only for **native** speaker

DISCUSSION

Influence of sociolinguistic / indexical variables on grammaticality judgments

- > Not a "pure" measure of grammar (Hofmeister et al., 2013)

Syntactic priming observed only for **native** speaker

- > Supports implicit learning views (e.g., Chang et al., 2000) of syntactic priming

Future work: Use accuracy of retyped sentences to rule out effect of intelligibility