Listening to Code-Switching — Do Bilinguals' Language Backgrounds Matter?

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Planned Study
Looking for feedback!

Background

Code-switching is the spontaneous switching from one language to another *or* the mixing of elements from two languages within a single conversation or utterance.[1,2]

Listening effort is the allocation of cognitive resources when completing a listening task.[3]

Changes in pupil dilation distinguish cognitive tasks that are more or less effortful across different domains.[3,4,5]

Previously unexplored is the cognitive effort associated with listening to code-switching, & how one's linguistic background influences that.

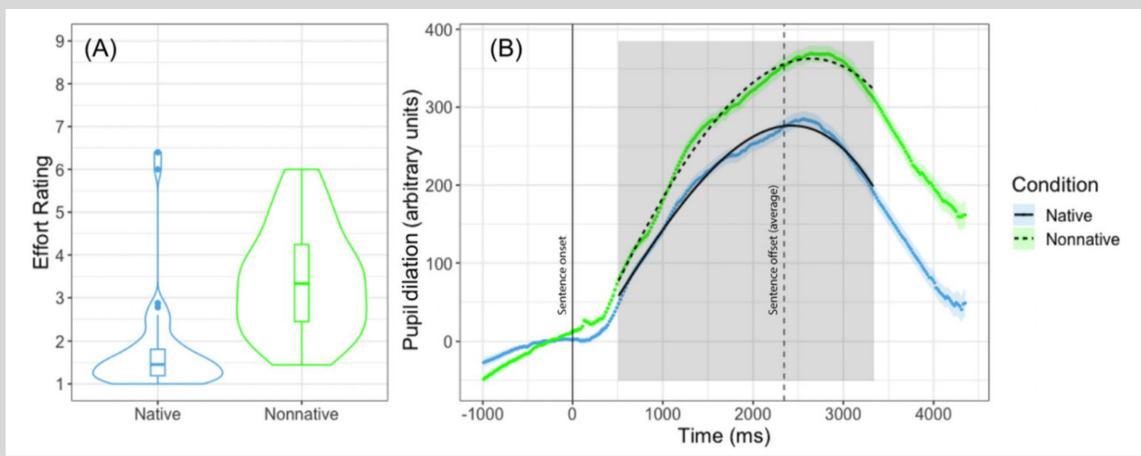
McLaughlin & Engen (2020)

Methodological basis for the proposed study design

Does hearing an unfamiliar accent impose greater cognitive effort than hearing a native accent?

Recordings of a native speaker of standard American English & a Mandarin-Chinese accented speaker of English

Greater cognitive effort & perceived effort when listening to non-native accented speech



How does a bilingual's language background influence the effort associated with listening to code-switching?

Language Questionnaire

Linguistic contexts: monolingual versus multilingual environments at varying age milestones

Experience with each language

Code-switching: frequency & intentionality

Stimuli

Based on spontaneous conversations between pairs of Spanish-English bilinguals in a "getting-to-know-you" task

Re-recorded by a native Spanish speaker

30 sentences, 2 versions each: code-switched & non-code-switched

Examples:

"So like my grandparents, they have a regular bathroom & stuff but their **bathtub/bañera** is still in the kitchen"

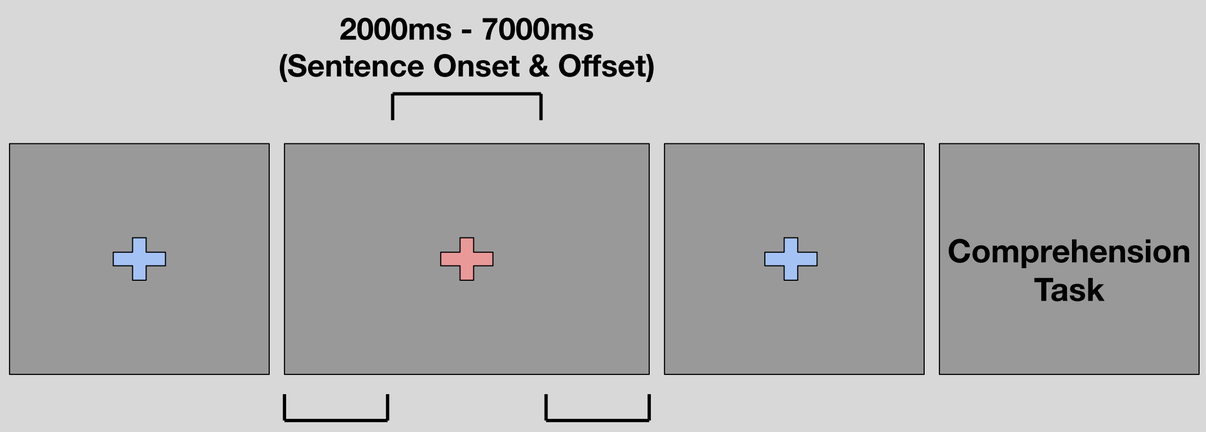
"We never had **elevator/ascensores** before in our building"

Procedure

Blue cross: blink freely

Red cross: try not to blink

Comprehension task: type or repeat out loud what was heard



Hypotheses

Separate bilinguals *(who engage their known languages in distinct/specific contexts)* will expend more effort when listening to code-switched sentences than integrated bilinguals *(who blend their known languages in multiple contexts)*.

If priming (for the target word) is present in the sentence, listeners will show less cognitive effort.

References & Notes

References: 1) Yim & Bialystok (2012); **2)** Grosjean & Miller (1994); **3)** Winn et al. (2018); **4)** Beatty (1982); **5)** McLaughlin & Engen (2020)

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Detecting and Addressing BIAS in Data, Humans, and Institutions