L1 grammar influences L2 processing: ERP evidence of transfer effects
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Introduction
Transfer ERP effects: influences of L1 on L2-processing?
How might L1-grammar/parsing facilitate or interfere with late/adult L2 acquisition and processing? In a recent review of ERP/P300 studies of L2 acquisition and processing [1], it is noted that ERP evidence bearing on the existence/nature of "transfer effects" is still quite scarce (see also [2, 3]).

Present Study
Native French speaking (ENGLISH-L1, N=24) and native Mandarin speaking (MANDARIN-L1, N=18) late-learners of English were tested along with monolingual native English speakers (ENGLISH-L1, N=18) in a sentence reading/judgment ERP study conducted in English. Note: Initial samples contained roughly half of the subjects.

Here we report findings from a violation paradigm designed to introduce an on-line conflict between L1 and L2.

Methods

Participants:
Materials:

Event-related potentials
English-L1

Acceptability Judgments

Mandarin-L1

Discussion 1 (initial sample)

L1, Mandarin
Primary Adj. N400/P600
- L1 more accurate than L2
- No between L2-group effects

Discussion 2 (new larger sample)

New Larger Sample

Results

Initial Sample

Event-related potentials

Acceptability judgments showed only L1/L2 differences

Well-formed: English-L1 > [French-L1, Mandarin-L1]

Violations: English-L1 < [French-L1, Mandarin-L1]

Event-related brain potentials

A) Nom-Adjective Order

L1 GROUPS
In addition to ERP indications of "non-native" processing generally...[10]
- L1 vs. L2 should show some ERP evidence of L1-interference for the French-L1 group only.

L2 GROUPS
In addition to ERP indications of "non-native" processing generally...[10]
- L1 vs. L2 should show some ERP evidence of L1-interference for the French-L1 group only.

Event-related brain potentials

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