

The influence of language errors on processing emotionally valenced content: Behavioral evidence from Polish-English bilinguals

Language errors have been the target of investigation for decades (Eisenstein 1983) with documented effects on message intelligibility (Nushi 2023), perceived competence (Xu 2020) or persuasiveness (Planken 2018). However, little is known about whether language errors directly modulate behavioral markers of processing emotionally valenced material, and whether such interference changes the magnitude of the Foreign Language Effect (FLE), that is the tendency for valenced material to exert weaker emotional influence when processed in a foreign language (Del Maschio 2022). This study examines whether language errors shift attention toward monitoring and repair, thereby attenuating sensitivity to linguistic valence and altering the L1-L2 difference in emotional processing.

Ninety proficient Polish-English bilinguals take part in the study. English proficiency is verified with LexTALE (Lemhöfer and Broersma 2011). Participants complete a sensibility judgment task in two language blocks (Polish and English). They read 140 short, two-sentence stories (70 per language) and decide whether each story makes sense. Sensibility can be violated in two ways; via syntactic violations (operationalized as erroneous preposition insertion) or semantic violations (i.e. sentence-final valenced word that is incongruent with the emotional context of the rest of the story). Error-free controls are included. Dependent measures are reaction time and accuracy. All stories are either positively or negatively valenced. A norming study was conducted, in which the stories were rated on valence and arousal. The sentence final valenced target words are nouns controlled for length, frequency, and cognate status; words directly naming emotions (e.g. *joy*, *anger*) were excluded. To enhance immersion and ecological validity, the stories were written in the second person perspective, inspired by the style of video game dialogue boxes (Fox 2015; Haverinen 2018 and 2022; Insertdisc5 2023).

Data will be analyzed using mixed-effects models (logistic models for accuracy and linear models for reaction times), testing the interaction Language (L1/L2) $\times$ Error (none/syntactic/semantic) $\times$ Valence (positive/negative). The primary prediction is that, in error-free trials, valence effects will be stronger in L1 than in L2, consistent with the Emotional Distancing Hypothesis (Keysar et al. 2012). Introducing errors is expected to increase monitoring and repair demands, reducing the resources available for affective engagement. Consequently, valence sensitivity should be attenuated, and the L1-L2 gap should narrow under error conditions.

In addition, errors are predicted to be generally more costly in L2 than in L1, reflected in slower responses and reduced accuracy, due to increased control demands during non-native language processing. Finally, we predict that negative L2 trials with semantic violations will be particularly costly; semantic incongruence at the sentence-final position should trigger strong integration difficulty, and error repair may be less automatic in L2. Overall, the study aims to broaden models of error processing by integrating them with the literature on emotional language processing and FLE, offering behavioral evidence on how linguistic correctness interacts with valence in bilingual comprehension.

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