Understanding L2 when emotions take over: The influence of mood on semantic integration in bilingualism – an ERP study

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The main aim of this PhD project is to examine to what extent mood (i.e., one's current emotional state) influences the semantic integration of words embedded in sentences in the native (Polish) and non-native language (English). Mood permeates all aspects of the human existence, including communicative interactions, oftentimes unobtrusively yet pervasively (Van Berkum *et al.* 2013). There exists ample evidence demonstrating that in the monolingual context positive and negative moods may differently modulate the language processing. One of the best documented findings is that integration of a word meaning is enhanced when participants are even in a moderately positive mood (e.g., Chwilla *et al.* 2011; Egidi and Nausbam 2011; Pinheiro *et al.* 2013; Delaney-Busch and Kuperberg 2013), and the opposite result has more recently been observed for the negative mood, too (e.g., Chwilla *et al.* 2011). Little if any attention, however, has thus far been devoted to the question of the mood by semantics interface in the context of bilingualism (Kharkhurin and Altarriba 2016). In modern times, bilingualism and multilingualism are more often considered the norm, and not monolingualism anymore, which shows that the research interests should now be turned to the bilingual language user.

To yield valuable insights into how the bilingual mind integrates word meanings in the sentential context when being greatly affected by the positive and negative mood states, a group of 40 highly proficient unbalanced late Polish-English female bilinguals will read 480 highly constraining, native (L1) and non-native (L2) sentences ending with a semantically congruent or incongruent word. A particular mood state will be continuously evoked experimentally by means of highly arousing, emotional animated film fragments. Participants' task will be to read the sentences and decide if they are meaningful or meaningless (a semantic decision task). In order to measure the ease/difficulty of semantic integration, behavioural and electrophysiological data will be collected. 2 x 2 x 2 repeated- measures *ANOVA*s will be performed on RTs and accuracy rates as well as on averaged N400 and LPC amplitudes and latencies. Mood (positive, negative), language (Polish, English), and semantic congruity (congruent, incongruent) will serve as within-subject independent variables.

Overall, the present project is expected to further contribute to the understanding of so-called *mood-dependent processing styles* (Kalat and Shiota 2012), which postulate that there are quantitative differences in language processing when a language user is in either a positive or a negative mood, by showing that being in an intense emotional state minimises the dissimilarities between bilingual and monolingual language processing at least in terms of semantic integration of words. It is noteworthy that to reach more generalisable conclusions concerning the bilingual communication, the present project adopts a pragmatic perspective (Van Berkum *et al.* 2013), that is, it brings together a broader communicative as well as affective contexts by using richer sentence-level embeddings instead of isolated words and by manipulating with participants' emotional states, respectively.

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