Affective Priming Effects Between Music and Language in Bilinguals' First and Second Language

M. S. Tenderini [*1], T. M. Eilola [*2], E. de Leeuw [#3], M. T. Pearce [†4]

[*]*School of Biological and Chemical Sciences, Queen Mary University of London, England*
[#]*School of Language, Linguistics and Film, Queen Mary University of London, England*
[†]*School of Electric Engineering and Computer Science, Queen Mary University of London, England*

[1]`m.s.tenderini@qmul.ac.uk`, [2]`t.eilola@qmul.ac.uk`, [3]`e.deleeuw@qmul.ac.uk`, [4]`marcus.pearce@qmul.ac.uk`

ABSTRACT

Background

This project investigated connections between the perception and processing of emotion in music and language. Previous research has shown interactions in emotional processing of music and language by means of the affective priming paradigm (Goerlich et al., 2012). Here this research is extended to examine differences in priming between bilinguals' first (L1) and second, later acquired (L2) language.

Aims

The main question was whether emotional responses to music, primed by affective words, differs between the L1 and the L2. In accordance with literature showing that late bilinguals often report their L2 to be perceived as less emotional (Dewaele, 2008) we hypothesised that L2 words would have weaker priming strength than L1 words on affective judgements of musical stimuli. Music on the other hand is hypothesised to prime affective responses equally in both languages.

Method

Single words (L1/L2) with a positive (e.g. 'friend') or negative (e.g. 'war') valence were presented together with musical excerpts with positive or negative valence (see Figure 1). Fifty German-English late bilinguals evaluated the second stimulus (target) as positive or negative while the prime preceding the target could either have congruent or incongruent valence. The first experiment examined responses to word-targets primed by music, while the second examined responses to music-targets primed by words. Reaction times (RT) and the electrophysiological neural response (N400 component) were analysed with respect to the congruence of the stimulus pair and language (L1, L2).

Results

The RT results supported our hypothesis: While music primed words of both languages, there was a difference between the L1 and L2 when priming the musical stimuli. The L1 words primed the musical excerpts; the L2 words however did not. EEG-data will be presented at the conference.

Conclusions

The behavioural results suggest decreased integration of emotional information communicated by L2 compared to L1 words. Conversely, music has a consistent priming effect across L1 and L2.

Keywords

affective priming; bilinguals; N400

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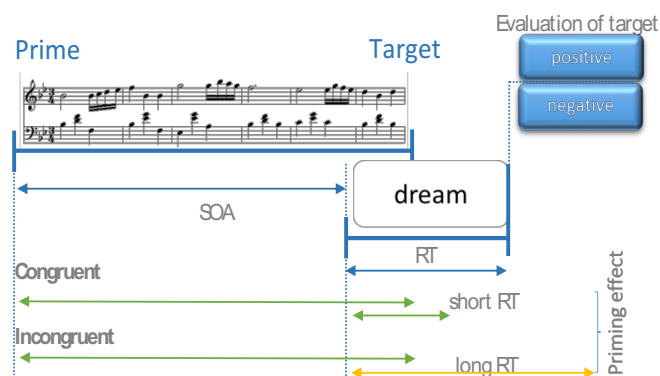

Figure 1. Affective priming paradigm with a music prime and a written word target. The presentation of the target stimulus is terminated by the evaluation of the participant; SOA = stimulus onset asynchrony, musical excerpt from Vieillard et al. (2008).