

Abstract

Previously, Deutsch, Henthorn, and Lapidis (2011) identified the speech-to-song (STS) illusion that a spoken phrase is perceived as singing after repetition. While no existing study examined the STS illusion with emotional stimuli, we conducted this study to investigate whether vocal emotion had a positive effect on STS illusion. We also expected a magnification effect on the perceived emotion because of the STS illusion. To test these ideas, we conducted an online experiment to a group of university students to test the effects of repetition and prosody on speech/song perception and vocal emotion perception. Contrary to our hypotheses, emotional voices did not elicit stronger STS illusion. Also, vocal emotions perceived were not amplified with repetition. Combining with the findings and the evidence from other study, we proposed a perceptual framework for emotional speeches. In particular, the findings give rise to the idea that emotion perception and music perception are parallel processes. Besides, the proposed framework also distinguishes between primary acoustic and secondary syntactic processing in music perception and STS illusion.

Keywords: speech-to-song illusion, vocal emotion