



Relating tone height and perceived pleasantness in the Didgeridoo and bass trombone

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Abstract

The motivation for this study came from the informal observation that didgeridoo tones seem to sound pleasant only over a span of less than an octave, while brass wind instruments of various types are found to be useful and pleasant over a much wider range. We therefore set out to explore the relationship between tone height and its perceived pleasantness and compare these evaluations both on a set of didgeridoos and on a bass trombone playing identical notes over a range slightly larger than one octave. Twenty listeners compared recordings of short tones from G1 to B2, played both on a bass trombone and a set of tubular didgeridoos, by proficient players. The listeners were asked to rate each note on a sliding scale from “very pleasant” to “very unpleasant”. Results showed that overall, the didgeridoo tones were found to be significantly more pleasant than the trombone tones. Surprisingly, the trombone tones were found to be more pleasant as tone height increased, while no correlation between tone height and pleasantness was found for the didgeridoo..

Keywords: perception, pleasantness, didgeridoo, didjeridu, trombone