

Does it swing? The Effect of Microtiming Deviations on the Swing Feeling in Short Piano Jazz Pieces

T. Albrecht¹, G. Datsaris², T. Geisel², Y. Hagemayer¹, V. Priesemann², and A. Ziereis*¹

*Corresponding Author: a.ziereis@stud.uni-goettingen.de

¹Georg-Elias-Müller-Institute of Psychology, Georg-August-University of Goettingen, Goettingen, Germany

²Max Planck Institute for Dynamics and Self-Organization, Goettingen, Germany

According to Keil's theory of Participatory Discrepancies (1966), Microtiming Deviations (MTD) are essential for the experience of groove in music. Recent empirical research, however, does not substantiate the necessity of MTD, but rather shows no effect or even negative effects on groove ratings. Since previous studies only used a small sample of stimuli, the aim of this study was to address these shortcomings by using a large sample of various piano jazz pieces to examine if quantized versions without MTD are preferred to unmanipulated original recordings. In an online survey, forty-four music experts rated a total of 20 piano jazz pieces in which either the original or the quantized version was randomly presented. The ratings show a general preference for the quantized version of a piece. The probability of a piece to be categorized as "swinging" could be best predicted by version (original vs. quantized) and by the Swing note-Quarter note ratio. The effects of other characteristics like swing ratio or velocity were inconclusive. In line with previous studies, the results indicate that MTD do not seem to be necessary for the Swing-Feeling. It remains to be further investigated under what circumstances (e.g., music genre, rhythm section vs. solo instruments) and to what extent (magnitude, variability, independency) MTD cause irritation.

Keil, C. M. H. (1966). Motion and Feeling through Music. *The Journal of Aesthetics and Art Criticism* 24 (3), 337-349. doi:10.2307/427969