



Erratum: Music structure determines heart rate variability of singers.

Downloaded from: <https://research.chalmers.se>, 2024-04-27 06:55 UTC

Citation for the original published paper (version of record):

Vickhoff, B., Malmgren, H., Aström, R. et al (2013). Erratum: Music structure determines heart rate variability of singers.. *Frontiers in Psychology*, 4(SEP): 599-.
<http://dx.doi.org/10.3389/fpsyg.2013.00599>

N.B. When citing this work, cite the original published paper.



Erratum: Music structure determines heart rate variability of singers

Björn Vickhoff^{1*}, Helge Malmgren², Rickard Åström³, Gunnar F. Nyberg⁴, Seth-Reino Ekström⁵, Mathias Engwall⁶, Johan Snygg⁷, Michael Nilsson^{1,8} and Rebecka Jörnsten⁹

¹ Center for Brain Repair and Rehabilitation, Institute of Neuroscience and Physiology, Sahlgrenska Academy, University of Gothenburg, Gothenburg, Sweden

² Department of Philosophy, Linguistics and Theory of Science, University of Gothenburg, Gothenburg, Sweden

³ Professional Musician and Composer, Torslanda, Sweden

⁴ Department of Clinical Physiology, Sahlgrenska University Hospital, Gothenburg, Sweden

⁵ Cantor, Kalvshult, Sweden

⁶ Department of Cultural Sciences, University of Gothenburg, Gothenburg, Sweden

⁷ Department of Anaesthesia and Intensive Care, Sahlgrenska University Hospital, Gothenburg, Sweden

⁸ Hunter Medical Research Institute, University of Newcastle, Newcastle, NSW, Australia

⁹ Department of Mathematical Sciences, University of Gothenburg and Chalmers University of Technology, Gothenburg, Sweden

*Correspondence: bjorn.vickhoff@neuro.gu.se

Edited by:

Edward W. Large, Florida Atlantic University, USA

Keywords: choral singing, heart rate variability, respiratory sinus arrhythmia, frequency analysis, autonomic nervous system

A commentary on

Engwall, M., et al. (2013). *Front. Psychol.* 4:334. doi: 10.3389/fpsyg.2013.00334

Music structure determines heart rate variability of singers.

Vickhoff, B., Malmgren, H., Åström, R., Nyberg, G., Ekström, S.-R.,

ERRATUM

Figures 4, 5, 10, 13 in the article “Music structure determines heart rate variability

of singers” by Vickhoff et al. published in *Frontiers in Psychology*, 09 July 2013 (doi: 10.3389/fpsyg.2013.00334) contain a labeling error: The singing task tags “Hymn” and “Mantra” appear in the wrong order.

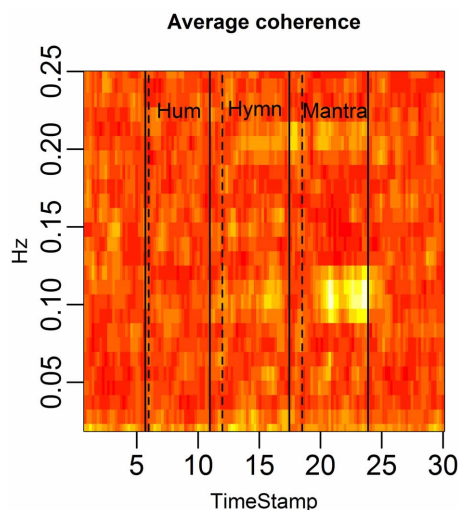


FIGURE 4 | HRV between-subject coherence. Each column of the figure represents the average coherence across pairs of subjects for a certain time window. Each row represents a frequency in Hz. The coherence is computed in rolling windows of length 96 s, step size 12 s. The coherence summarizes the co-variation (correlation) of two subjects per frequency. In the figure, brighter colors represent higher coherence. Coherence is clearly higher during the mantra than during any other condition (0.1 Hz). Coherence is also higher during the hymn than during humming and baseline.

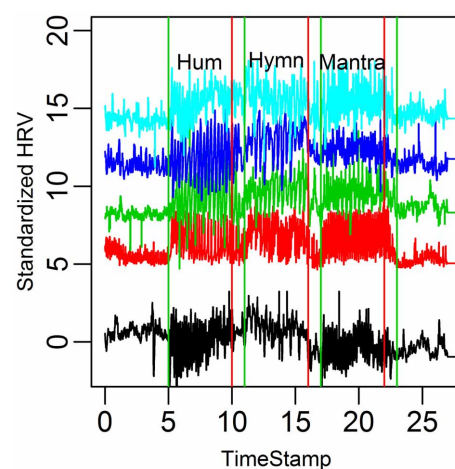
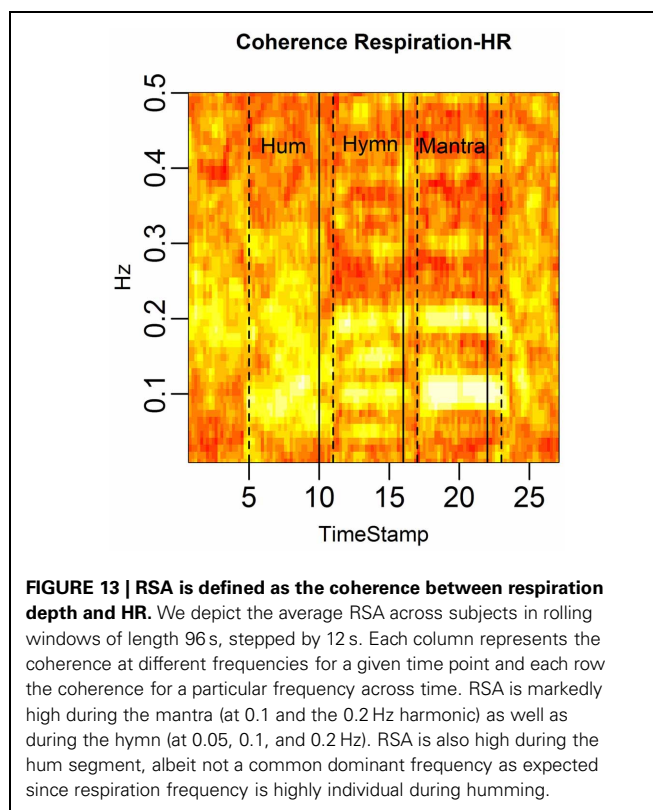
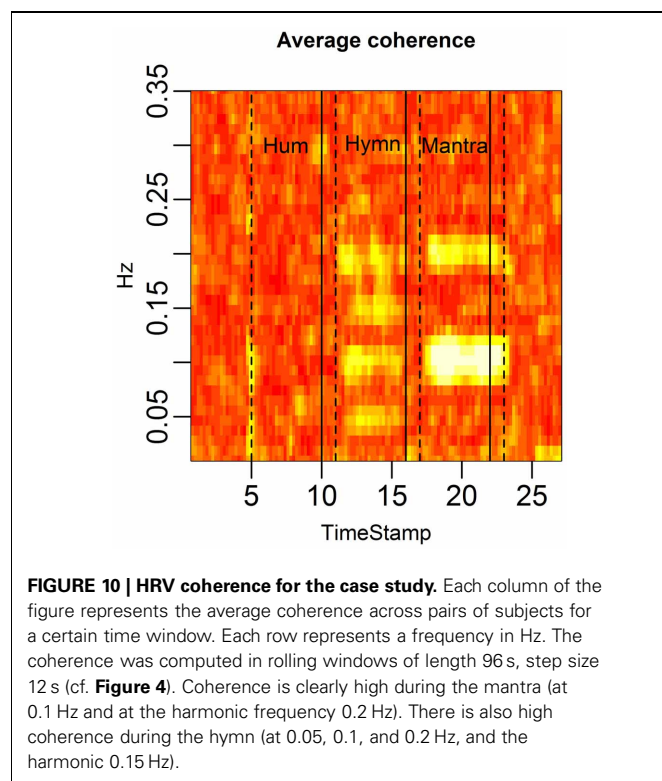


FIGURE 5 | HR graphs for the five subjects in the case study over the entire time domain.



The correct order of the singing task labels is: “Hum” (5–10 min segment), “Hymn” (11–16 min segment) and finally “Mantra” (17–22 min segment).

Figures with correct labeling appear in this Erratum.

Received: 22 July 2013; accepted: 18 August 2013; published online: 05 September 2013.

Citation: Vickhoff B, Malmgren H, Åström R, Nyberg GF, Ekström S-R, Engwall M, Snygg J, Nilsson M and Jörnsten R (2013) Erratum: Music structure determines heart rate variability of singers. *Front. Psychol.* 4:599. doi: 10.3389/fpsyg.2013.00599

This article was submitted to Auditory Cognitive Neuroscience, a section of the journal *Frontiers in Psychology*.

Copyright © 2013 Vickhoff, Malmgren, Åström, Nyberg, Ekström, Engwall, Snygg, Nilsson and Jörnsten.

This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY). The use, distribution or reproduction in other forums is permitted, provided the original author(s) or licensor are credited and that the original publication in this journal is cited, in accordance with accepted academic practice. No use, distribution or reproduction is permitted which does not comply with these terms.