Supplementary Materials for "Emotion Painting: Lyric, Affect, and Musical Relationships in a Large Lead-Sheet Corpus"
Abstract:
How are lyrical emotions expressed in music? This paper explores the correlation between affect-carrying lyrics and musical features such as beat strength, duration, pitch height, consonance, and mode. Using computer-aided musicology software music21 and the NRC emotion lexicon, we conduct a corpus study on 1,895 folk and popular song lead-sheets encoded as MusicXML. The study reveals that metrical strength and note lengths are highly correlated with affects, while correlations of pitch height, consonance, and mode are in general less significant, at times contradicting previous research. Measurements of minor vs. major chordal context and tonal certainty, however, reveal certain previously unknown differences among emotional states. The paper uses a larger dataset of observations and gives greater values of significance than has appeared in symbolic corpus analysis of emotions in the past, and includes general discussions and directions for future work.
Supplemental material available online: www.esforum.de/sfr10/. All rights reserved. No part of this book may be reproduced in any form by electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from the publisher. Whatever our level of expertise, we understand both language and music as auditory patterns to be made and generated, but also as embedded in a variety of multimodal behaviors (not just vocal) that play a key role in a range of social behaviors. Supplementary Materials for “Emotion Painting: Lyric, Affect, and Musical Relationships in a Large Lead-Sheet Corpus”. Sun, Sophia H.; Cuthbert, Michael Scott (2017). How are lyrical emotions expressed in music? This paper explores the correlation between affect-carrying lyrics and musical features such as beat strength, duration, pitch height, consonance, and mode. Using computer-aided Supplementary Materials for “Tapping to Carter: Mensural Determinacy in Complex Rhythmic Sequences”. Poudrier, Ève (2017). The tapping paradigm has played an important role in fo One of the common ways that phoneticians and other researchers have looked at emotion-in-language is by studying acted affect. That is, you get a bunch of people to read number lists or the alphabet in “angry” voice, “happy” voice, etc. Then you see if other people can reliably guess the emotion and then you go and look for the acoustic correlates. And if you wanted to detect what’s going on in a call center, “angry actors” wouldn’t help you nearly as much as “actual callers who are annoyed/disappointed/etc”. If you’re curious about more naturalistic corpora/research, here are some resources you might find useful (they’re all on my web page about emotions and language: http://www.stanford.edu/~tylers/emotions.shtml).