

Introduction to Musical Corpus Studies

Fabian C. Moss

13 November 2020

Musikwissenschaftliches Seminar - Universität zu Köln - WS 2020/21

Today

Introduction (16:00–17:20)

- I. What are Musical Corpus Studies?
- II. Issues
- III. Examples
- IV. Organization of the course
- V. Questions

— *Break* —

Melody I (17:40–19:00)

Resources

- main organization via ILIAS
- literature
- forum
- Zoom link (you are all here)
- external website: <https://fabianmoss.github.io/intro-corpusmus>
 - general info
 - course materials (updated after each session)
- HfMT students: by your group members

- 3 CPs = 90 SWS
 - 24 SWS presence in seminar
 - 24 SWS preparation of and follow-up on course materials
 - 42 SWS reading of literature and writing of report

Group work

- you will meet with your group in the breakout rooms
- discussions
- exercises

- report due on **31 January 2021, 23:59h**
- 6–8 pages
- suggested structure
 1. Introduction
 2. Discussion
 3. Issues
 4. Various
 5. Contributions

I. Computational Music Analysis

I. Computational Music Analysis

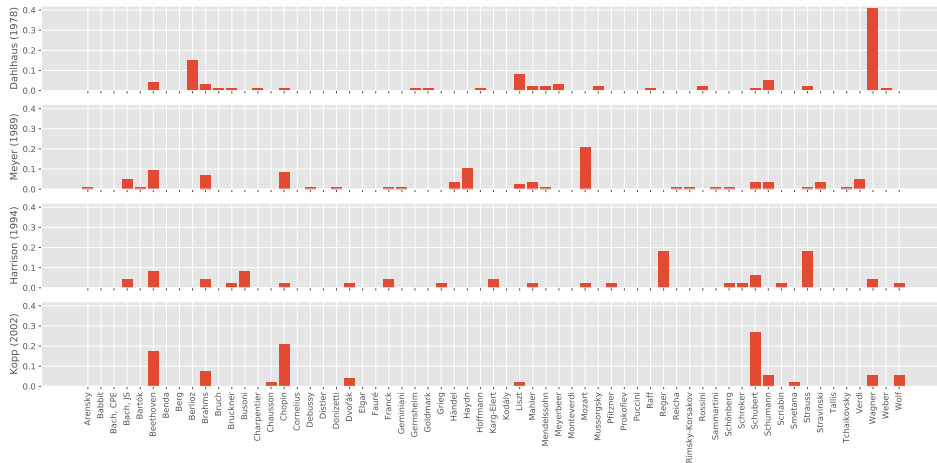
Potential of Computational Music Analysis

I. Computational Music Analysis

Potential of Computational Music Analysis

1. complementing music theory (e.g., addressing potential biases)

I. Computational Music Analysis



I. Computational Music Analysis

Potential of Computational Music Analysis

1. complementing music theory (e.g., addressing potential biases)
2. resolving ambiguities in terminology

Definitions of Tonality

“the term is sometimes used as an equivalent for what Rousseau called a système musicale, a rational and self-contained arrangement of musical phenomena”

(Hyer, 2001)

Definitions of Tonality

“the term is sometimes used as an equivalent for what Rousseau called a système musicale, a rational and self-contained arrangement of musical phenomena”

(Hyer, 2001)

“the relations between musical elements, e.g. notes or chords in a corpus”

(Moss, 2019)

I. Computational Music Analysis

Potential of Computational Music Analysis

1. complementing music theory (e.g., addressing potential biases)
2. resolving ambiguities in terminology
3. empirically validating theoretical assumptions & asking entirely new questions

References

- Cohn, R. (1998). Introduction to Neo-Riemannian Theory: A Survey and a Historical Perspective. *Journal of Music Theory*, 42(2), 167–180.
- Hostinský, O. (1879). *Die Lehre von den musikalischen Klängen: Ein Beitrag zur aesthetischen Begründung der Harmonielehre*. H. Dominicus.
- Hyer, B. (2001). Tonality. In S. Sadie & J. Tyrrell (Eds.), *The New Grove Dictionary of Music and Musicians* (2nd ed., pp. 583–594). Macmillan Publishers.
- Lieck, R., Moss, F. C., & Rohrmeier, M. (in review). The Tonal Diffusion Model.
- Moss, F. C. (2019). *Transitions of Tonality: A Model-Based Corpus Study* (Doctoral Dissertation). École Polytechnique Fédérale de Lausanne. Lausanne, Switzerland.
<https://doi.org/10.5075/epfl-thesis-9808>
- Moss, F. C., Lieck, R., & Rohrmeier, M. (in prep.). Modeling historical changes in pitch-class distributions.

- Moss, F. C., Neuwirth, M., Harasim, D., & Rohrmeier, M. (2019). Statistical characteristics of tonal harmony: A corpus study of Beethoven's string quartets. *PLoS ONE*, 14(6), e0217242.
<https://doi.org/10.1371/journal.pone.0217242>
- Neuwirth, M., Harasim, D., Moss, F. C., & Rohrmeier, M. (2018). The Annotated Beethoven Corpus (ABC): A Dataset of Harmonic Analyses of All Beethoven String Quartets. *Frontiers in Digital Humanities*, 5(July), 1–5. <https://doi.org/10.3389/fdigh.2018.00016>
- Piantadosi, S. T. (2014). Zipf's word frequency law in natural language: A critical review and future directions.. *Psychonomic Bulletin & Review*, 21(5), 1112–30.
<https://doi.org/10.3758/s13423-014-0585-6>
- Zipf, G. K. (1949). *Human behavior and the principle of least effort*. Addison-Wesley Press.