Analyses on the History, Form, and Use of the Essen Folksong Collection

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EsAC

ALTDEU

CUT[Das Hildebrandslied]

REG[Europa, Mitteleuropa, Deutschland]

KEY[A0001 04 G 4/2]

MEL[1_ 3b_3b_4_4_ 5__5__

0_5__5_ 5_6_7b_5_ 5__0_

5_ 5_6_7b_5_ 6b__5__

0_5_4_3b_ 5_3b_3b__

0_3b_3b_3b_ 4_4_5__ 5__0_

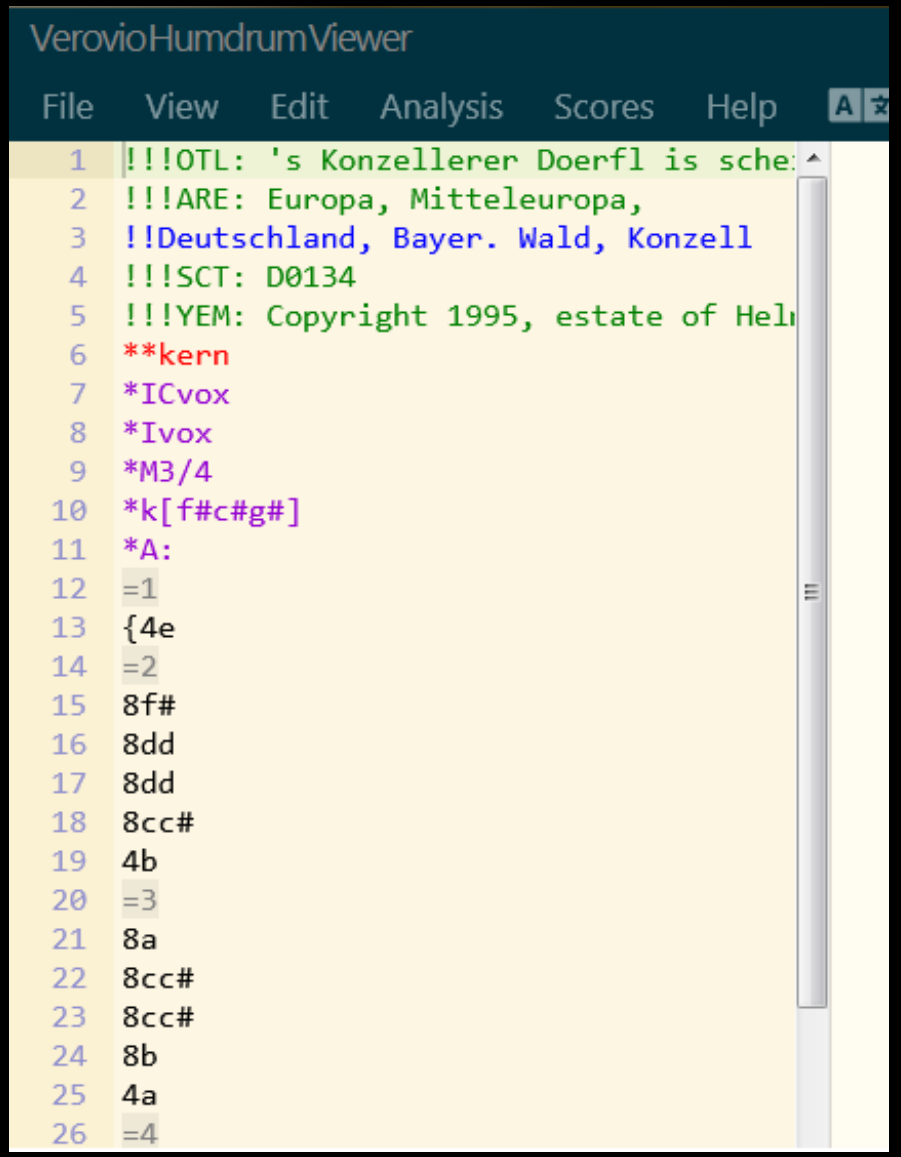
5_ 4_3b_3b_3b_ 2__1__

0_5_5_.4 3b__0_

5_ 6b_5_5_3b_ 4__5__

0_4_3b3b1_ 1_-6_-7__ 1__. //] >>

FCT[Romanze, Ballade, Lied]



Examples of folksong material encoded in the EsAC format (left) and in **kern (right). Credit to Craig Sapp for creating Verovio for online viewing of **kern files

Nine Primary Sources of the Essen Folksong Collection

- *Liedertafel: Eine Sammlung von Liedern, Romanzen und Balladen*, ed. Joh. N. Vogel. Vienna, 1845
  - Subsection: *allerkbd*
- *Altdeutsches Liederbuch. Volkslieder der Deutschen nach Wort und Weise aus dem 12. bis zum 17. Jahrhundert*. ed. Franz Magnus Bühme. Leipzig, 1877.
  - Subsection: *altdeu*
- *Lieder, Balladen und Romanzen für das Piano-Forte*, ed. Carl Friedrich Zelter. 3 vols. Berlin (ohne Jahre) [1812]
  - Subsection: *ballad*
- *Volksthümliche Lieder der Deutschen im 18. und 19. Jahrhundert*, ed. Franz Magnus Böhme. Leipzig, 1895.
  - Subsection: *boehme*
- *Zentrum für Populäre Kultur und Musik Liederlexikon* (Online database hosted by the University of Freiburg)
  - Subsection: *dva*
- *Deutscher Liederhort. Auswahl der vorzüglicheren Deutschen Volkslieder,* originally collected by Ludwig Erk; revised and edited by Franz Magnus Böhme in 3 vols., Leipzig, 1893-94.
  - Subsection: *erk*
- *Musikalischer Hausschatz der Deutschen*, ed. Gottfried Wilhelm Fink [1783-1846] (Leipzig, 1842). Repr. Gera, 1893.
  - Subsection: *fink*
- *Kinderlied und Kinderspiel: Volksüberlieferungen aus allen Landen deutscher Zunge*, ed. Franz Magnus Böhme, Leipzig, 1897
  - Subsection: *kinder*
- *Deutsche Volkslieder mit ihren Original-Weisen,* Ed. A. Kretschmer und Wilhelm von Zuccalmaglio, 2 vols., Berlin, 1838-40
  - Subsection: *zuccal*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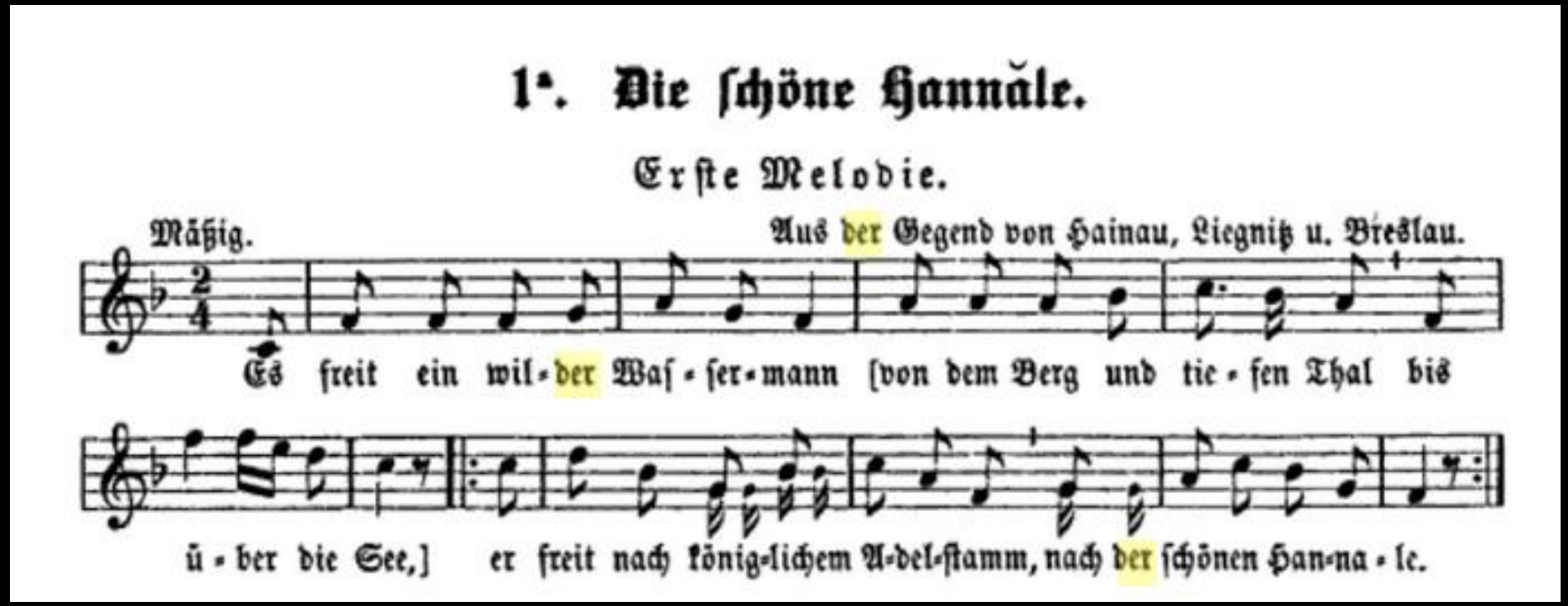
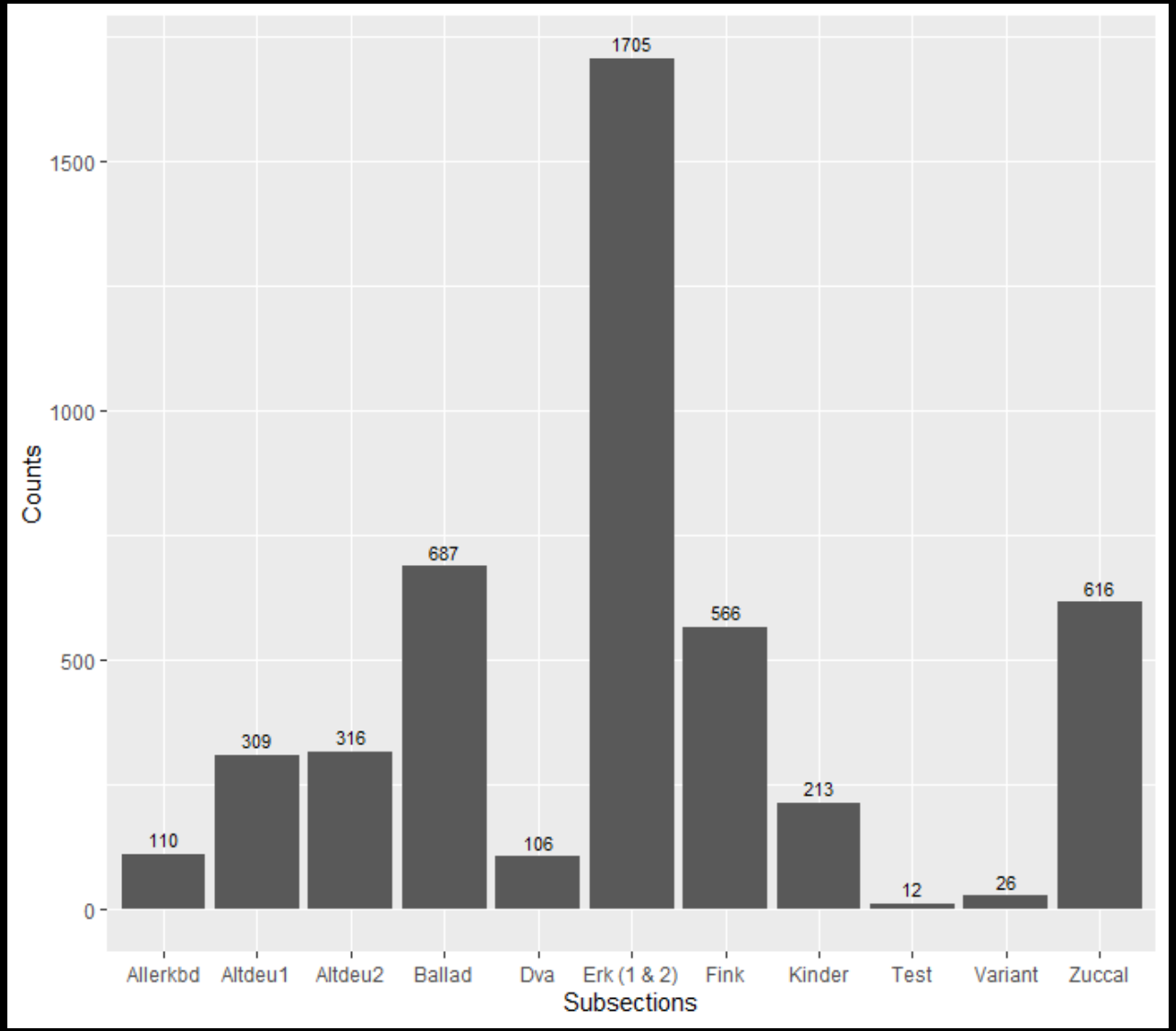
Zürich
Innsbruck
Vaduz
LIECHTENSTEIN
Berne
SWITZERLAND
Lausanne
Bolzano
Bozen
Geneva
ITALY
SLOVENIA
GERMANY
National capital
State capital
City, town
International boundary
State boundary
Main road
0 25 50 75 100 km
0 25 50 mi



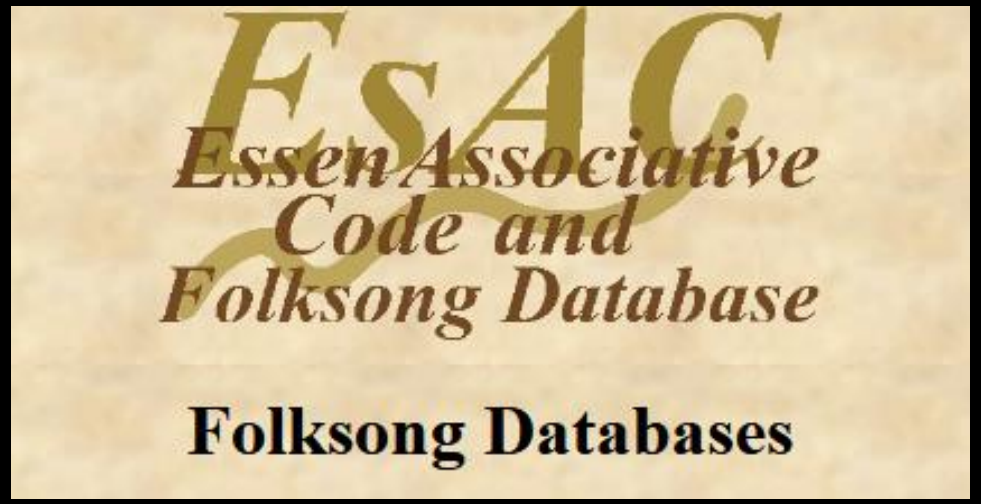
First entry in the primary source, yet distinctly absent from the relevent *erk* subsection. One of many examples

From Erk, L. (1893). *Deutscher Liederhort: Auswahl der vorzüglicheren deutschen Volkslieder, nach Wort und Weise aus der Vorzeit und Gegenwart* (Vol. 1). Breitkopf und Härtel

Altdeu – 2 subsections
Ballad – 8 subsections
Boehme – 2 subsections
Dva – 1 subsection
Erk – 4 subsections
Fink – 1 subsection
Kinder – 1 subsection
Test – 4 subsections
Variant – 1 subsection
Zuccal – 1 subsection

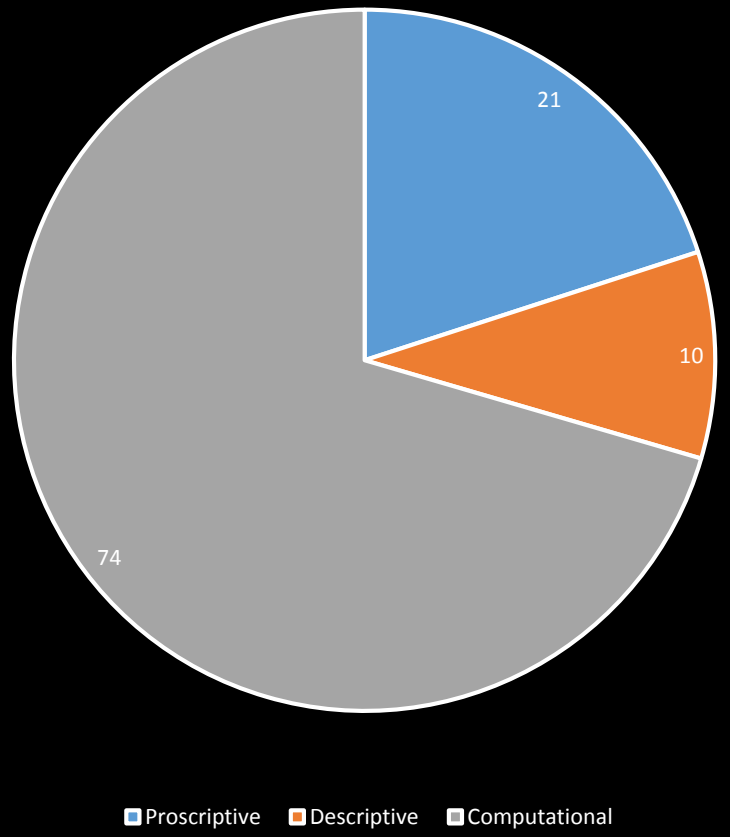


Not pictured: *Boehme* (705 songs)


FSAC
Essen Associative
Code and
Folksong Database
Folksong Databases


Kern
Scores

Estimated Distribution of Essen Collection Citations



These are only approximations as the exact quality of several studies can be debated. Nearly 50 studies not pictured merely mention the Collection and do not use it.

Selected Proscriptive Studies (in order of mention)

- Temperley, D. (2000). Meter and grouping in African music: A view from music theory. *Ethnomusicology*, *44*(1), 65–96.
- Temperley, D. (2003). End-Accented Phrases: An Analytical Exploration. *Journal of Music Theory*, *47*(1), 125–154.
- Temperley, D. (2004). *The cognition of basic musical structures*. MIT press.
- Temperley, D. (2007). *Music and probability*. Mit Press.
- Temperley, D. (2008). A probabilistic model of melody perception. *Cognitive Science*, *32*(2), 418–444.
- Temperley, D. (2009). A unified probabilistic model for polyphonic music analysis. *Journal of New Music Research*, *38*(1), 3–18.
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- Temperley, D. (2019). Second-Position Syncopation in European and American Vocal Music. *Empirical Musicology Review*, *14*(1–2), 66–80.
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- Toiviainen, P., & Eerola, T. (2001a). *Self-organizing map of the essen collection*. ISSCM.
- Toiviainen, P., & Eerola, T. (2003). Where is the beat?: Comparison of Finnish and South African listeners. *Proceedings of the 5th Triennial ESCOM Conference*, 501–504.
- Toiviainen, P., & Eerola, T. (2006a). Autocorrelation in meter induction: The role of accent structure. *The Journal of the Acoustical Society of America*, *119*(2), 1164–1170.
- Toiviainen, P., & Eerola, T. (2006b). Visualization in comparative music research. In *COMPSTAT 2006-Proceedings in Computational Statistics* (pp. 209–219). Springer.
- Toiviainen, P., & Eerola, T. (2002). A computational model of melodic similarity based on multiple representations and self-organizing maps. *Proceedings of the Seventh International Conference on Music Perception and Cognition, Sydney. Causal Productions, Adelaide*, 236–239.
- Toiviainen, P., & Eerola, T. (2001b). A method for comparative analysis of folk music based on musical feature extraction and neural networks. *III International Conference on Cognitive Musicology*, 41–45.
- Toiviainen, P., & Eerola, T. (2004). The role of accent periodicities in meter induction: A classification study. *Proceedings of the Eighth International Conference of Music Perception and Cognition*, 422–425.

Selected Proscriptive Studies (in order of mention)

- Bailes, F. (2010). Dynamic melody recognition: Distinctiveness and the role of musical expertise. *Memory & Cognition*, *38*(5), 641–650.
- Bernardes, G., Cocharro, D., Guedes, C., & Davies, M. E. (2016). Harmony generation driven by a perceptually motivated tonal interval space. *Computers in Entertainment (CIE)*, *14*(2), 1–21.
- Brinkman, A., & Huron, D. (2018). The leading sixth scale degree: A test of Day-O'Connell's theory. *Journal of New Music Research*, *47*(2), 166–175.
- Dean, R. T., & Pearce, M. T. (2016). Algorithmically-generated corpora that use serial compositional principles can contribute to the modeling of sequential pitch structure in non-tonal music. *Empirical Musicology Review*, 27–46.
- Hannon, E. E., Snyder, J. S., Eerola, T., & Krumhansl, C. L. (2004). The role of melodic and temporal cues in perceiving musical meter. *Journal of Experimental Psychology: Human Perception and Performance*, *30*(5), 956.
- Ammirante, P., & Russo, F. A. (2015). Low-skip bias: The distribution of skips across the pitch ranges of vocal and instrumental melodies is vocally constrained. *Music Perception: An Interdisciplinary Journal*, *32*(4), 355–363.
- Huron, D., Yim, G., & Chordia, P. (2010). The effect of pitch exposure on sadness judgments: An association between sadness and lower than normal pitch. *Proceedings of the 11th International Conference on Music Perception and Cognition*, 63–66.
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- Margulis, E. H. (2007). Silences in music are musical not silent: An exploratory study of context effects on the experience of musical pauses. *Music Perception: An Interdisciplinary Journal*, *24*(5), 485–506.
- Schäfer, T., Huron, D., Shanahan, D., & Sedlmeier, P. (2015). The sounds of safety: Stress and danger in music perception. *Frontiers in Psychology*, *6*, 1140.

Selected Computational Modeling Studies (in order of mention)

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- Pearce, Marcus T., & Wiggins, G. A. (2006). Expectation in melody: The influence of context and learning. *Music Perception: An Interdisciplinary Journal*, *23*(5), 377–405.
- Pearce, Marcus T., & Wiggins, G. A. (2012). Auditory expectation: The information dynamics of music perception and cognition. *Topics in Cognitive Science*, *4*(4), 625–652.
- Hillewaere, R., Manderick, B., & Conklin, D. (2012). String Methods for Folk Tune Genre Classification. *ISMIR*, *2012*, 13th.
- Van Kranenburg, P., & Janssen, B. (2014). What to do with a digitized collection of western folk song melodies. *Proceedings of the 4th Workshop on Folk Music Analysis (FMA)*.
- Lattner, S., Grachten, M., Agres, K., & Chacón, C. E. C. (2015). Probabilistic segmentation of musical sequences using restricted Boltzmann machines. *International Conference on Mathematics and Computation in Music*, 323–334
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- Rohrmeier, M., Rebuschat, P., & Cross, I. (2011). Incidental and online learning of melodic structure. *Consciousness and Cognition*, *20*(2), 214–222.
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- Sadakata, M., Desain, P., & Honing, H. (2006). The Bayesian way to relate rhythm perception and production. *Music Perception*, *23*(3), 269–288.
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- Elowsson, A., & Friberg, A. (2012). Algorithmic composition of popular music. *The 12th International Conference on Music Perception and Cognition and the 8th Triennial Conference of the European Society for the Cognitive Sciences of Music*, 276–285.
- Flossmann, S. (2012). *Expressive performance rendering with probabilistic models: Creating, analyzing, and using the Magaloff Corpus*. na.

Selected Computational Modeling Studies continued (in order of mention)

- Cherla, S., Tran, S. N., Garcez, A. d'Avila, & Weyde, T. (2015). Discriminative learning and inference in the Recurrent Temporal RBM for melody modelling. *2015 International Joint Conference on Neural Networks (IJCNN)*, 1–8.
- Juhász, Z. (2009). Automatic segmentation and comparative study of motives in eleven folk song collections using self-organizing maps and multidimensional mapping. *Journal of New Music Research*, *38*(1), 71–85.
- Lambert, A. J., Weyde, T., & Armstrong, N. (2014). Studying the effect of metre perception on rhythm and melody modelling with LSTMs. *Tenth Artificial Intelligence and Interactive Digital Entertainment Conference*.
- Ronca, P. (2009). Pattern recognition by simplicial analysis. *2009 Sixth International Conference on Fuzzy Systems and Knowledge Discovery*, *7*, 155–158.
- Tanji, M., Ando, D., & Iba, H. (2008). Improving metrical grammar with grammar expansion. *Australasian Joint Conference on Artificial Intelligence*, 180–191.
- Ren, I. Y. (2016). *Closed patterns in folk music and other genres*. na
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- Von Hippel, P., & Huron, D. (2000). Why do skips precede reversals? The effect of tessitura on melodic structure. *Music Perception: An Interdisciplinary Journal*, *18*(1), 59–85.
- Li, Y., & Huron, D. (2006). Melodic Modeling: A Comparison of Scale Degree and Interval. *ICMC*.
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- Van Kranenburg, P., Garbers, J., Volk, A., Wiering, F., Grijp, L., & Veltkamp, R. (2007). Towards integration of music information retrieval and folk song research. *Proceedings of the 8th International Conference on Music Information Retrieval*, 505–508.

Thanks for watching!

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