Hierarchical Annotation of MEI-encoded Sheet Music

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What?



- Analysis is seen as relating notes
 - to each other
 - in different levels of significance
 - in a specific type of relation
- Analysis is interaction with the score
- Analysis does not change the score itself



- For encoding existing analyses
- For making new analyses
- For teaching analysis
- For visualizing analyses

How?

- Render MEI[2] or MusicXML[1] using Verovio[3]
- Click to select, shift-click to prioritize
- Choose or specify a type of relation
- Fetch MEI including encoded relations





Figure 1:Example MEI graph encoding, based on the scheme in [4]

Figure 2:The webapp in action. The teal areas denote harmonic relations, red neighbour relations, blue repeated notes, and purple passing motions. Greyed-out notes are secondary.

Showcase: Schenkerian analysis

Figure 3:Mozart, Piano Sonata K. 545, II, bars 1-6, reduction from Cadwallader and Gagne 2011 "Analysis of Tonal Music: A Schenkerian Approach", p. 118. Animation available at: https://dcmlab.github.io/reductive_analysis_app/images/schenker.gif

Figure 4:Bach, "O Haupt voll Blut und Wunden", BWV 244/44, analysis from Lerdahl and Jackendoff 1983 "A Generative Theory of Tonal Music", p. 115. Animation available at: https://dcmlab.github.io/reductive_analysis_app/images/gttm.gif

Showcase: MOP Annotation

Figure 5:Chopin, Mazurka, op. 33/2, reduction and analysis from Yust, 2018 "Organized Time: Rhythm, Tonality and Form", pp 33-34. Animation available at: https://dcmlab.github.io/reductive_analysis_app/



Future Work

This app is under active development. The source code can be found at https://github.com/ DCMLab/reductive_ analysis_app/. Our intention is to support computational musicology by building a tool for encoding both existing and new hierarchical analyses of symbolic music into a standardized form.

References

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