Tools for Musical Audio Analysis

Johanna Devaney

This class will cover Sonic Visualiser and Sonic Annotator, as well as a number of plug-ins that expand the automatic annotation capabilities of the software tools as well as methods for batch processing audio files.

Please bring your laptop to class.

Before the class

1. Download and install the following software:

Sonic Visualiser: https://www.sonicvisualiser.org

Sonic Annotator: https://code.soundsoftware.ac.uk/projects/sonic-annotator/files

Vamp Plugins

Chordino and NNLS Chroma: http://www.isophonics.net/nnls-chroma

Mazurka: http://www.mazurka.org.uk/software/sv/plugin/

MATCH: https://code.soundsoftware.ac.uk/projects/match-vamp/

Melodia: https://www.upf.edu/web/mtg/melodia
pYIN: https://code.soundsoftware.ac.uk/projects/pyin

Queen Mary: https://vamp-plugins.org/plugin-doc/qm-vamp-plugins.html
Segmentino: https://code.soundsoftware.ac.uk/projects/segmenter-vamp-plugin

If you encounter any issues installing the software, you can either email me about them before the class (johanna.devaney@brooklyn.cuny.edu) or we can go over them at the start of class.

2. Read the following:

- Devaney, J. 2023. Digital Audio Processing Tools for Music Corpus Studies. The *Oxford Handbook of Music and Corpus Studies*. Eds. D. Shanahan, J.A. Burgoyne, I. Quinn.
 - focus on sections 1, 2, and 3.1
- Devaney, J. and H. Leveillé-Gauvin. 2019. Encoding music performance data in Humdrum and MEI. *International Journal for Digital Libraries*. 20 (1): 81–91.
- Devaney, J. and C. Beauchamp. 2023. Encoding performance data in MEI with the Automatic Music Performance Analysis and Comparison Toolkit (AMPACT).